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The Wilson Bulletin

Official Organ of The Wilson Ornithological Club

An Illustrated Quarterly Magazine
Devoted to the Study of
Birds in the Field

Edited by Lynds Jones

Nineteen Hundred and Seven

Old Series, Volume XIX New Series, Volume XIV

Published by the Club at Oberlin, Ohio

Index to Vol. 19, 1907.

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Bald Eagle (*Haliaetus leucocephalus*) on the wing near its nest, Crane Island, Lewiston Reservoir, Ohio, April 3, 1906.

[Photo by G. C. Fisher]

THE
WILSON BULLETIN
NO. 58
A QUARTERLY JOURNAL OF ORNITHOLOGY
VOL. XIX MARCH, 1907 NO. 1

THE PARIDÆ OF GERMANY.

BY REV. W. F. HENNINGER.

The Palæarctic Region has many forms of this family when compared with the Nearctic. Setting aside subspecific niceties —and as long as subspecies do not differ appreciably from the species proper biologically I do not see the reason for laying so much stress upon the distinctions in life history sketches of birds—there are just nine species of titmice proper found in the old Fatherland. Of these, however, Cyanistes cyaneus is only a casual visitor from the east, Panurus biarmicus from the southeast, and Remiza pendulina only at rare times a summer resident. This leaves six species for discussion.

One must either recognize the one genus Parus or must consider each species to belong to a different genus, and in the light of the points of difference brought out by a thorough scientific investigation it is hard to understand how anything other than the creation of separate genera for each species could be thought of. Parus major, the Big Cole or Great Tit; Periparus ater, the Brown Cole Tit; Cyanistes cœruleus, the Blue Tit; Penthestes palustris, the Swamp Tit; Lophophanes cristatus, the Crested Tit, and finally Aegithalus caudatus, the Long-tailed Tit. They all differ considerably in coloration, and while I do not wish to inflict a long-winded description of the various species upon the readers of the Bulletin, still the following diagnosis will be necessary.

Parus major.—Back yellowish-green, upper tail coverts bluish-gray, under parts yellow, top of head, throat and a streak down the anus black, cheeks white. Length 14 centimeters, tail 6 ctm.

Parus ater.—Upper parts bluish-ash, lower parts whitish, head and neck black, a big cheek patch and a longitudinal stripe on the nape white. Length 11 ctm., tail 5 ctm.

Cyanistes cœruleus.—Wings, tail, top of head sky blue; a wing band, edge of cheeks and nape white; cheeks lined with blue; streak through the eye and a small spot in the nape bluish-black; rest of upper parts green, under parts yellow. Length 12 ctm., tail 5.5 ctm.

Penthestes palustris.—Whole top of head black with a metallic bluish tinge; spot on chin black; upper parts brownish-gray overlaid with rufous; sides of throat, breast, flanks, and lower parts rusty whitish; wings and tail darker and grayer. Length 11.5 ctm., tail 4.8 ctm.

Lophophanes cristatus.—Upper parts reddish over a brownish-gray; lower parts whitish; feathers of head black with whitish tips; a conspicuous crest; a streak through the eye, throat, two stripes to the occiput black; cheeks white; wings and tail dark grayish-brown. Length 12 ctm., tail 4.5 ctm.

Aegithalus caudatus.—Head and lower parts white; sides of breast, under tail coverts, lower back overlaid with light reddish-brown; tail wedge-shaped, the four middle rectrices black, the rest black with whitish tips and outer edges; front part of back and wings blackish. Total length 15 ctm., of which the tail measures 9 ctm.

The Long-tailed Tit (Aegithalus caudatus) is commonly called 'The Panhandle,' and a more appropriate sobriquet could not be found. Imagine a birdikin whose body is a trifle smaller than that of our Winter Wren, reminding you of a thimble-like fluffy ball of cotton, with a tail that resembles the handle of a frying-pan, and you will understand the name 'Panhandle.' The first time I met this most charming acrobat of the Titmouse family was on February 1, 1889. A sudden dash of warm winds had made the snow entirely disappear.

Picking my way along the edge of a small park, struggling through the mire against a severe gust of wind, I was not paying the usual close attention to the surroundings when a sharp whirr made me look up, and just at that moment I saw a troop of from ten to fifteen 'Panhandles' alighting in some birch trees. It seemed as if a small flight of miniature white arrows was showered from twig to twig, from branch to branch. Hanging on the lower side of the boughs, encircling others with their tiny claws, performing all sorts of gymnastic exercises about them, whirring to another tree, examining all crevices for insects, sounding their sharp notes 'derr derr,' these titmice were certainly to all appearances a large edition of animated snowflakes. Never did I see a flock of birds make a more careful and systematic search for insects and their eggs than this swarm of pygmies; and they did it so rapidly that it almost made your head ache by trying to keep your eyes riveted on this bunch of busybodies. They disappeared just as swiftly as they had come. Though a tender bird in outward appearance this little dwarf is perfectly hardy and many, many of its families brave the storms of northern Germany, yea the farther south you go the rarer it is until in Spain and Greece it is seldom found.

The birds are not as quarrelsome as other members of the family Paridæ, but are jolly and more active, roving about in troops not only in winter and fall, for my earliest dates of troops of 25 or 30 are June 28, 1892, near the Rhine. The birds seem to prefer the non-coniferous forests; where the deciduous trees are missing they are not often found, and even then they will prefer parks and orchards to the depths of the woods. In their rambles they are frequently associated with other titmice, kinglets and creepers. Their song is a sweet melodious twitter that does not carry very far, according to my observations. As a nest-builder, however, the Long-tailed Tit develops a mastership that calls forth our highest admiration. In contrast to the other members of the family except Panurus biarmicus and Remiza pendulina, it builds a nest, not being satisfied with a cavity only, although some observers state

that the nest proper is sometimes placed in a cavity. The nests I have found were all placed in birch trees, but of course numerous other kinds of trees and even elder and juniper bushes are used. One side of the nest leans against the body of the tree, the bottom resting upon a bough and fastened to it.

It is a delight to watch the birds building their domicile. They begin by placing a number of mosses and lichens on the bough, perhaps to the extent of four or five centimeters, carrying the material with their tiny bills, and making trips at regular intervals, never going very far away from the home-place. They securely fasten the material with larger pieces, then build upon this, clinging the while to the outside walls with their tiny feet, thus working away until they have felted an oval-shaped ball fifteen or twenty centimeters in height and probably eleven or twelve centimeters in circumference. They line the inside with feathers, wool, and horse-hair, leaving a round entrance hole a trifle above the center of the ball. The outside of this wonderful piece of workmanship, which it takes about three weeks to complete, is so closely covered with lichens, spider-webs and the like, that it cannot be distinguished with certainty from many a knot with which the branches are covered. One must therefore resort to the practice of watching the female as she goes to and from the nest. Some writers assert that the entrance to the nest is always on the east side but I must confess that this is a point that has escaped me.

The Long-tailed Tit is very prolific, as many as 17 eggs having been found in a nest, while I have always found ten. Eggs in my collection from Holland show about the average measurement of 14 by 10 millimeters.

Nest building comes in April. I found ten young ready to fly on May 18, 1890 (see Wm. Baer, Ornis der preussischen Oberlausitz, page 31). Incubation lasts about 13 days. The young are fed with great regularity about every five minutes with a great variety of insects, insect eggs, and larvæ. When older they stick their long tails through the walls of the nest,

producing a very ludicrous appearance to the whole affair, but eliminating the necessity of cleaning the nest. The birds are said to raise a second brood in some localities, the second brood appearing in June.

The coloration of the young differs considerably from that of the old birds. The head and neck are black or sooty, the throat and lower parts are white with a grayish tinge. It is needless to say that the Long-tailed Tit is a wholly beneficial bird, well deserving the universal protection and welcome wherever it is met with.

The Crested Tit (Lophophanes cristatus) forms the greatest contrast to the Long-tailed Tit, at least as far as habitat is concerned, for it is a lover of the gloomy depths of the coniferous forests—pines as well as firs. All the different titmice troop together in the fall with kinglets, creepers, and nuthatches, and generally have as their leader a fine specimen of the Great Spotted Woodpecker. Common need brings them together, and the all absorbing food question seems to be the controlling feature of their roving lives. But when the zephyrs of spring call, the troops disband and the individuals betake themselves to the serious business of house-keeping. Even into the almost solemn gloom of the pine forest a ray and breath of the warm sunshine seems to float and bring with it the jolly Crested Tit.

The passion of love causes the male to erect his crest, assume the most peculiar coquettish appearance, almost dancing around his ladylove, who, like all of her sex, wants to be coaxed before she declares herself conquered. During this time one can hear the low twitter of their mating song which is totally different from their call notes, but yet insignificant as far as beauty and melody are concerned. Coupled with these actions is an increased activity in searching for food, and the time of year assures a bountiful harvest of insects. Among the branches, under the bark, on the ground, among the rootlets of the trees they search with wonderful agility and energy. Wherever the food is abundant they tarry longer, one taking the place of another, chasing this neighbor, pinching that one

in the leg, fighting with a third, but never losing an opportunity for an inviting morsel. Finally they are mated and have selected a knot-hole or a hole made by the carpenters of the forest—the woodpeckers—or, as the convenient nesting sites are growing fewer every year, take to some artificial bird box hung by a friendly hand of the 'Deutscher Verein zum Schutze der Vogelwelt,' or even into the walls of a deserted squirrel or magpie nest.

Two broods of from eight to ten are reared every year. The eggs of all the titmice species resemble one another in coloration, the ground color being a white with reddish-brown and rusty spots. However, they differ in measurements and in the arrangement of the spots so that it is comparatively easy to refer an egg to the species. The eggs of this species measure 16 by 12 millimeters.

While the young are being fed the Crested Tit often visits deciduous trees to gather the fat young caterpillars and does not confine its efforts to the firs and pines only. The young, when you come near to their habitation, will eye you with the same curiosity as the old ones, will raise their crests just as quickly and scold you just as emphatically. When the rigorous frosts of early fall come they grow restless and soon seek the companionship of other titmice until we find the large groups of birds which roam through the woods all winter. Such groups are only occasionally disturbed by the swift and furious attacks of the Sparrow Hawk (Accipiter nisus). With spring the round of life in families again begins.

The Brown Cole Tit (Periparus ater) is another of the lovers of the coniferous forests, though clinging more to the pines than to the firs. Impudence, jollity, and an inclination to quarrel are common traits of all tits, and this species is no exception to the rule. While the notes of all titmice are similar a trained ear will know the various species at once. The notes of this species might be rendered as a low 'sis sis sis sisi.'

This is another of the wholly beneficial species. It clears the pines of insect pests, but also eats some seeds.

Old hollow stumps, if handy, are their most common nesting sites, but the scarcity of these has driven this species under ground. On July 17, 1889, we found a nest in an old deserted badger hole, the nest an arm's length under the ground. It was neatly made of horse hair, cattle and badger hair, grass, moss, and a few feathers. At another time I saw a bird flying into a mouse hole near a roadside, but this nest, too, had no eggs. Sometimes even heaps of stones are utilized. Nesting occurs in May, but on May 20 we have found a nest containing eleven young about ready to fly. From six to eleven eggs constitute a set. The eggs measure 15.5 by 11.5 millimeters.

The Brown Cole Tit is one of the last to join the titmouse assembly in fall, and one of the first to leave it in the middle of March; in fact this species has fewer distinguishing features than any of the rest.

The Blue Tit (Cyanistes coeruleus) is the most beautiful colored one of them all. The peculiar blending of colors, the tameness, and confidence it places in man, the sagacity and cunning, and the omnipresence of this species make it well known to all. While it seems to prefer the deciduous trees to the coniferous woods, I have found it equally abundant in both except during the breeding season. Its strong inclination to quarrel is a characteristic which we must deplore. Not only will the birds fight among themselves to a bitter finish, but they will even kill other birds weaker than themselves; indeed, they do not seem afraid to battle with species of greater strength and size. But what of it! Nesting sites are few and the trouble of finding them great and time consuming, and why should the intruder live? A few strokes of the beak crush the skull of the intruding rival, the would-be robber of the long-sought home, and the trouble is ended. Who will blame the Blue Tit if it defends to the death its house and home? Moreover, why should we persecute the Blue Tit on that account? Nature always maintains a right balance and will adjust itself if man will only not meddle, for 'only man is vile.' There is too much rubbish written about useful and detrimental species, all wholly from the standpoint of the sel-

fish utilitarian standpoint of man. The question is not merely whether the species is found to be beneficial or harmful after the examination of the contents of many stomachs by experts of the Department of Agriculture, and hence should be protected or not protected, but rather, as a German naturalist has recently said, 'Nature must be full of interesting figures, of various voices, that man may find pleasure in it, for only out of nature can a nation regain vitality, energy, and power. Nations who have lost their feeling for nature, like the Italians and Spaniards, by killing off the feathered songsters and making a solitude of their forests and fields, have the germs of death in their national lives; in fact, are only living artificial lives. Nations who retain a strong feeling for nature as the Teutonic, Slavic, and Japanese, can be beaten to the ground and like Anteus of old can rise with renewed vigor. Consequently every government should be wise enough to keep this feeling alive within the nation, and one of the means is the preservation of existing forms whether beneficial or not.' Then why try to persecute the Blue Tit? No, let it live to be enjoyed by both young and old.

The same nesting places are sought by the Blue Tit as by the other members of this family, the same jealous quarrels and love affairs are pursued, the same roving habits taken up in the fall and winter.

The eggs number from six to ten, and measure 15 by 12 millimeters. By the end of May the young are ready to fly. Incubation is performed by the female alone, but the young are provided for by both parents. I found their nests in the knot-holes of the oak more often than in any other tree.

The Great Tit (Parus major) is in many respects a larger edition of the Blue Tit, but still has many peculiarities of its own. It also prefers the deciduous trees to the coniferous woods, but during the breeding season is not quite as much restricted to them as the Blue Tit, and is found in mountains and foot hills as often as in the valleys and on the plains.

The characteristic call note is a loud 'pink, pink,' the mating note a 'bissi' or a 'disda disda,' but there are many other

notes. Early in March we hear these notes when intense rivalry exists among the males for the affections of some coveted female.

There is no rest in the life of the Great Tit, nor is it ever disgruntled except on rare occasions. In this, as well as in its inquisitiveness, it is an exact counterpart of our House Wren or Bewick's Wren. Its actions are a revelation of mouselike rapidity, dodging, turning from side to side on a twig, creeping through holes, prying into the stable or quarreling with a colleague. At times the bird is so grotesque and comical that you cannot suppress a fit of laughter, especially since it seems to take everything in dead earnest. It looks at you as much as to say: 'Did you ever see a more astute being?'

Alas, the Great Tit has the same murderous quality of character as the Blue Tit.

The Great Tit likes to use the same domicile as that of the previous season. Into this cavity the female drags moss, feathers, wool, and other materials; she is accompanied by the male who, however, does not help in carrying the material, in which respect he is like the Indian whose idea is 'Big Chief no work, squaw work.' After the foundation has been laid the industrious worker spies out the cattle and horse hairs that are left hanging on the bushes and thorn hedges with which to line the nest. In placing and arranging the lining she uses both bill and feet. The eggs are from seven to thirteen in number and measure 17.5 by 13.5 millimeters.

While the female is performing the office of incubation the male supplies her with caterpillars, and after the young have hatched he joins the female and redoubles his efforts to supply the loudly clamoring young. A second brood is generally reared, for by the end of May the young of the first brood are ready to fly.

Besides the cavities supplied by nature I have found these birds breeding in holes in telegraph and telephone poles. They also have regular sleeping holes which are not, however, used for breeding purposes.

The Swamp or Marsh Tit *(Penthestes palustris)* has always

been my favorite among the German titmice. It reminds one of our American Chickadee in coloration as well as in habits. Both belong to the same subgenus. This is the jolliest and quickest of the German tits. From early morning to the fall of night it is constantly on the go, and the woods ring with the call note—'sia.' Its love plays are similar to those of the Tree Pipit *(Anthus trivialis)* described in the Wilson Bulletin for March, 1903.

It loves to select a sleeping hole to spend the night in. During the summer of 1890 one always slept in a knothole in our rustic bowling alley, and neither the rumble of the balls, the cracking of the pins, nor the talking and laughing of the crowd, nor even the fact that I often caught her in my hands, caused her to leave her favorite abode. She became perfectly fearless of our presence.

The food of this tit consists of insects, and of seeds, principally the seeds of the sunflower in the fall.

The hollow tops and holes in old willows are preferred to any other places in which to deposit the eggs. Such holes are generally filled out with moss, dry grass, and hair, but I have found them placed on the chips or sawdust without any nesting material whatever. From five to ten eggs are laid, which measure 15 by 12 millimeters. Wm. Baer, in his 'Ornis der preussischen Oberlausitz,' page 32, mentions my finding three eggs of the subspecies *meridionalis subpalustris,* which is correct, as I caught the bird on the eggs on May 3, 1891; but he does not mention my set of five eggs taken on April 22, 1890, which at the time he referred to the same subspecies. The former was given to a friend, but the latter is still in my possession. The subspecific distinctions in the case of the Marsh Tit are of more value than most subspecies, for if all observations prove true their life histories, call notes, etc., are different.

Taken all together the family Paridæ contains most charming and interesting birds which are well worth being introduced into this country where they would likely form a most desirable and profitable acquisition.

All members of this family can be easily kept in confinement, the Long-tailed Tit being the most troublesome in this respect.

BALD EAGLES' NEST AT LEWISTOWN RESERVOIR.

BY G. C. FISHER.

Early in March of last year there appeared in the local newspapers of Western Ohio statements regarding an eagles' nest which had been constructed at the Lewistown Reservoir. Following is a verbatim excerpt from one of these articles:

"A sight which has not been witnessed in Ohio for years is now being viewed by duck hunters on the Lewistown Reservoir. On Crane Island of that fishing resort two large-sized bald eagles have during the winter erected their nest in the top of two tall oaks. The birds are beautiful specimens and many hunters have endeavored to bring one or both to earth. The nest appears from the ground to be fully twenty feet square and from ten to fifteen feet in depth."

Our attention was thus turned to this point of interest, and regardless of the evident exaggeration and inaccuracy, we were anxious to see the object of this press comment.

The Lewistown Reservoir is located in Logan County, Ohio, and is near the T. and O. C. Railroad, about eighteen miles east of Wapakoneta. It belongs to the State of Ohio, and was originally constructed as a feeder for the Miami and Erie Canal. It covers 7,200 acres, or nearly twelve square miles, and is now a famous resort for duck hunters, fishermen, and camping parties. In the Fish and Game Laws, it is known as "Indian Lake," although Indian Lake is, in reality, only a small part of the Lewistown Reservoir.

Arriving at the Reservoir on the afternoon of March 26, 1906, we were greatly disappointed to find that the ice had not yet gone off "The Pond." It was too rotten to walk upon with safety, and yet not a hole in sight, even with a good field

Nest of Bald Eagle Crane Island, Lewiston Reservoir, Logan County, Ohio, April 3, 1906. Photo by G. C. Fisher.

glass. For the first two days we were unable to get out in a boat, but we meandered around through some of the surrounding marshes where we had the opportunity of observing a pair of Red-shouldered Hawks. We were favored with hearing their plaintive cry a great many times as they sailed low over the marshy woods. We also heard the Blue Jay in his very successful efforts at imitating them.

By the morning of the third day the ice had broken up out in the open water. We could see that Otter Lake was all open; so we pushed our boat out on the rotten ice at the edge, and began pushing and pulling it out toward the open

water. We were always ready to jump into the boat when the ice should suddenly give way. Rotten ice doesn't give much warning. When the ice began to give way, we were compelled to break out the rest of the way with our oars. We did not go to the eagles' nest this day because of cloudiness, hoping that we would be favored later with a bright day so that we might get some photos. More than fifty Herring Gulls were seen sitting on the ice or flying about. It was a little early for ducks although there was a considerable number of Mallards, Black Ducks, and American Widgeons on "The Pond." A few Blue-Bills, a Hooded Merganser, and a few Red-breasted Mergansers were seen. We secured a fine specimen of a male American Golden-eye. Several flocks of Canada Geese were seen. A large speckled Loon came past us flying low over the water. We also saw a few American Coots.

The next day proved to be cloudy, cold, and drizzly, but we concluded to go to the Eagles' nest, for there seemed to be little prospect of fair weather. Landing on Crane Island we began cautiously to approach the tall American Elm in which the nest was located. (Upon arriving at the Reservoir, we learned that it had not been built "in the top of two tall oaks.") We had approached within sixty yards of the tree before the eagle, which was apparently brooding at the time (March 29), flew from the nest. Its white head and tail could be distinctly seen. It circled about uttering its cry, while we observed the nest and photographed it. We then withdrew and watched the eagle return to the nest. During the following week we secured a number of photos.

According to the testimony of some of the old residents this is the first eagles' nest that has been built at the Lewistown Reservoir in their memory. Notwithstanding this fact, and in spite of the law protecting them, we learned that efforts had been made to kill the eagles even to the extent of using a high-power rifle at long range.

Contrary to the newspaper report, we thought the nest appeared to be about five feet in diameter and three feet in height or depth. It was made of brush.

From July 31 to August 4, 1906, we again had the opportunity of visiting the place. At this time we observed both adults and both young. The latter were in their dark plumage with some blotches or streaks of white. We were privileged to observe them several times and to hear their cries until familiar. It is to be hoped that the game warden will do his duty in seeing that these magnificent birds will be preserved for the pleasure of all who may enjoy them.

AUGUST BIRDS OF LAKE SEBAGO, MAINE.

BY CHRESWELL J. HUNT.

Thirty miles from Portland, in Cumberland County, Southwestern Maine, lies Sebago, one of those glacial lakes which are scattered all over the state. It is twelve miles long with an expanse of eight miles at its widest point. Aside from a few summer camps and several saw mills the shores remain in their wild state. These shores are rocky with here and there sandy beaches behind which lies a forest of white pine and spruce interspersed with white and yellow birches. Here the undergrowth is composed largely of the moose-wood *(Acer pennsylvanicum)* and the ground is covered with mossy boulders about which grow clusters of wintergreen *(Gaultheria procumbens)*, bunch berry *(Cornus canadensis)* and clintonia *(Clintonia borealis)*, together with numerous ferns.

To the north of Lake Sebago lies Long Lake, the two being connected by the Songo River, a crooked little stream which flows six miles to go two miles as the crow flies. A line of small steamboats ply between Sebago Lake at the foot of Lake Sebago and Harrison at the head of Long Lake. To the westward the country rolls away toward the White Mountains, the hills about the lake reaching a height of from 500 to 1,300 feet.

The week of August 6th to 13th, 1906, was spent in company with Mr. B. W. Griffiths at the head of Lake Sebago, making the little village of South Naples our headquarters. We were ten miles from the nearest railroad station (Mattocles on the Main Central), and in the way of showing that the country retained some of its wildness, I might mention that in returning from a boat trip up the Muddy River, which entered the lake at South Naples, we surprised a doe and fawn within a mile of the settlement, also the beach from which we took our daily swim was marked with footprints of deer. Back from the lake the villages are small and the farms few and scattered.

According to Mr. Hoffmann's faunal map of New England, in that excellent little volume "The Birds of New England and Eastern New York," Lake Sebago lies in the Transition or Alleghenian Zone.

August is not the ideal month for field work but one can always learn something and there are two facts that made deep impressions in my mind. First, that though one be surrounded by a boreal fauna and flora, the temperature can climb very high indeed. Second, that the State of New Jersey does not hold as big a monopoly upon the mosquito as I had always been led to believe. We had them both in abundance —heat and mosquitoes—and I must confess that the cool crystal waters of the lake were far more enticing than the mosquito-ridden woods. But although our swims were possibly too frequent and a bit lengthy, we did not neglect the birds, and though the following is by no means a complete list, I cannot help but feel that it includes most of the birds to be found here during early August.

One of the men employed in the saw mill told me that the Wood Duck and Black Duck both breed about the lake. He also said that a great many of the small birds that were now becoming fairly common had been almost unknown in that section until two or three years ago.

Very few hawks were seen and no owls. The total absence of White-throated Sparrows surprised me, as also did the

finding of Hermit Thrushes and no Veerys of Olive-backs.

We were greatly amused by the curiosity displayed by a male Loon. We had gone to explore Trickey Pond, a small sheet of water lying to the north of the lake, and had forced our way through the bushes at its edge and each stepped out upon a rock projecting into the water. We had stood for several minutes looking about when a harsh laugh reached us, and a look revealed the bird swimming about near the farther shore. I tried to imitate his wild laugh and immediately he answered me. Thus we kept it up for some time, the bird diving and coming up again at a point somewhat nearer us, until at last we had him within 200 yards. I would not ask a better look at any bird. The binoculars showed every feather! We were standing in plain sight with no attempt whatever at concealment. His curiosity was far greater than his fear.

1. *Gavia imber.*—Loon. Seen several times.
2. *Ardea herodias*—Great Blue Heron. Several.
3. *Totanus melanoleucus.*—Greater Yellow-legs. A single bird.
4. *Actitis macularia.*—Spotted Sandpiper. A number seen.
5. *Bonasa umbellus.*—Ruffed Grouse. Said to be conmon. On each of the two only extended tramps into the woods we flushed a covey.
6. *Buteo borealis.*—Red-tailed Hawk. Several.
7. *Buteo lineatus.*—Red-shouldered Hawk. Saw only one.
8. *Haliaeetus leucocephalus.*—Bald Eagle. One male.
9. *Coccyzus erythrophthalmus.*—Black-billed Cuckoo. Several.
10. *Ceryle alcyon.*—Belted Kingfisher. A few seen.
11. *Dryobates pubescens medianus.*—Downy Woodpecker. Abundant.
12. *Sphyrapicus varius.*—Yellow-bellied Sapsucker. Heard on several occasions.
13. *Geophloeus pileatus ebieticola.*—Northern Pileated Woodpecker. Seen frequently during the winter. Said to spend the summer in the more secluded swamps. Upon the shore of the lake stood a dead tree, the side of which had without question been excavated by this species.
14. *Colapates auratus luteus.* Northern Flicker. Fairly common.
15. *Antrostomus vociferus.*—Whip-poor-will. Heard singing on several evenings.
16. *Chordeiles virginianus.*—Nighthawk. A number seen.
17. *Chaetura pelagica.*—Chimney Swift. A few seen at North Sebago. Absent about South Naples.
18. *Tyrannus tyrannus.*—Kingbird. Fairly common.

19. *Sayornis phoebe.*—Phoebe. Common.

20. *Contopus virens.*—Wood Pewee. Common.

21. *Empidonax traillii alnorum.*—Alder Flycatcher. Only one seen.

22. *Cyanocitta cristata.* Blue Jay. Seen only twice but said to be common.

23. *Corvus brachyrhyuchos.*—American Crow. Fairly common.

24. *Dolichonyx cryzivorus.*—Bobolink. One small flock.

25. *Astragalinus tristis.*—Goldfinch. Common.

26. *Pooecetes gramineus.*—Vesper Sparrow. Seen in old pasture on side of Peaked Hills.

27. *Spizella socialis.*—Chipping Sparrow. About clearings.

28. *Spizella pusilla.*—Field Sparrow. Common in suitable locations.

29. *Junco hyemalis.*—Junco. Seen only on the Peaked Hills and near Songo Lock.

30. *Melospiza cinerea melodia.*—Song Sparrow. Abundant.

32. *Progne subis.*—Purple Martin. Common about South Naples.

32. *Hirundo erythrogastra.*—Barn Swallow. Common.

33. *Tachycineta bicolor.*—Tree Swallow. Abundant.

34. *Ampelis cedrorum.*—Cedar Waxwing. Abundant.

35. *Vireo olivaceus.*—Red-eyed Vireo. Common.

36. *Mniotilta varia.*—Black and White Warbler. Fairly common.

37. *Dendroica aestiva.*—Yellow Warbler. Several. Only heard the song and was a bit doubtful of this species until the following week at Camden on the Penobscot Bay, 125 miles farther east and in a distinctly Canadian fauna—according to Hoffmann—I positively identified one of this species.

38. *Dendroica pensylvanica.*—Chestnut-sided Warbler. A few seen.

39. *Dendroica blackburniae.*—Blackburnian Warbler. One at Mattocks.

40. *Dendroica vigorsii.*—Pine Warbler. Common near Mattocks. Not seen at South Naples.

41. *Seiurus aurocapillus.*—Oven-bird. Only one seen.

42. *Sylvania canadensis.*—Canadian Warbler. Fairly common.

43. *Setophaga ruticilla*—Redstart. Fairly common.

44. *Galeoscoptes carolinensis.*—Catbird. Rather common about clearings.

45. *Certhia familiaris americana.*—Brown Creeper. Several at Mattocks.

46. *Sitta canadensis.*—Red-breasted Nuthatch. A number at Mattocks.

47. *Penthestes atricapillus.*—Chickadee. Abundant everywhere.

48. *Hylocichla guttata pallasii.*—Hermit Thrush. In song—common. Besides the Robin and Bluebird this was the only thrush found about So. Naples.

49. *Merula migratoria.*—Robin. Fairly common.

50. *Sialia sialis.*—Bluebird. Not common.

ADDITIONS TO THE BIRDS OF OHIO.

BY LYNDS JONES.

In a state as long settled as Ohio it is not to be supposed that there would be any such shifting of the bird fauna as to bring into it regularly occurring species, but on the other hand, it would not be supposed that there would be no further new occurrences of an accidental nature after a list had once been made and approved. In my Revised Catalogue published three and a half years ago I tried to show that there is a definite north-eastward movement of the breeding birds which has already resulted in pushing some species which formerly nested along the extreme northern border northward out of the state, while other species have come into the state and become regular breeders along its south-western border. A continuance of such a movement must inevitably sooner or later bring to our fauna more of the more southward nesting species, such as the Nonpareil and Blue Grosbeak. No such additions have been made in the interval since the Revised Catalogue was published, but several additions have been made to the list of Accidental occurrences. The following species are further additions to this list:

Larus franklinii.—Franklin's Gull. I found the specimen which is now in the Oberlin College collection in the taxidermist shop of Mr. Thos. M. Earl of Columbus. A hunter had brought it into his shop to be mounted but left it there. It was shot at the Licking Reservoir on October 15, 1906. The hunter stated that there was another bird of the same kind with it.

Ammodramus leconteii.—Leconte's Sparrow. Mr. Charles Dury informs me that he accidentally found a speciamen of this sparrow in his collection labeled Grasshopper Sparrow. It was captured by him in a swampy meadow near Ross Lake on April 5, 1880. It is an adult male.

The Yellow-breasted Chat in Michigan. A correction. In his article in Wilson Bulletin No. 54, page 17, Mr. P. A. Taverner states that the two nests secured by Messrs. Wisener and Davidson were in Grosse Pointe. The nest found by Mr. Wisener was on Private Claim 618, Gratiot Tp., and that by Mr. Davidson on Private Claim 49, Ecorse Tp. Mr. Taverner did not mention a set of three eggs found by Dr. T. H. Potter and recorded by Dr. Philip E. Moody in Michigan Bulletin, Vol. IV, No. 4, p. 97. This nest was north of Detroit, and probably on the same ground where he met with his 1905 birds. J. CLAIRE WOOD.

BIRDS FOUND WITHIN A RADIUS OF TWELVE MILES OF SUMMIT, NEW JERSEY.

BY LARUE KLINGLE HOLMES.

The subjoined list represents the partly completed work of one of our most active members whose untimely end we all deplore. While this list is admittedly unfinished, and would undoubtedly have been far more fully annotated had Mr. Holmes been able to do the necessary desk work or dictation, it is now published as he left it by special request so that it may form the basis for further work by the members of the rapidly increasing membership of the LaRue Holmes Nature League.

Colymbus holboellii.—Holboell's Grebe

Colymbus auritus.—Horned Grebe.

Podilymbus podiceps.—Pied-billed Grebe.

Gavia imber.—Loon.

Gavia lumme.—Red-throated Loon.

Larus argentatus.—Herring Gull.

Sterna hirundo.—Common Tern.

Merganser americanus.—American Merganser.

Merganser serrator.—Red-breasted Merganser.

Lophodytes cucullatus.—Hooded Merganser.

Anas boschas.—Mallard.

Anas obscura.—Black Duck.

Chaulelasmus strepera.—Gadwall.

Mareca americana.—Baldpate.

Nettion carolinensis.—Green-winged Teal.

Querquedula discors.—Blue-winged Teal. Rare.

Spatula clypeata.—Shoveller.

Aix sponsa.—Wood Duck. A rare summer resident, formerly more common.

Aythya americana.—Red-head.

Aythya vallisneria.—Canvas-back.

Clangula americana.—American Golden-eye.

Branta canadensis.—Canada Goose.

Botaurus lentiginosus.—American Bittern. Rare summer resident, found in the large fresh water marshes.

Ardetta exilis.—Least Bittern. Probably a rare summer resident.

Ardea herodias.—Great Blue Heron.

Florida caerulea.—Little Blue Heron.

Butorides virescens.—Green Heron. A rather common summer resident.

Nycticorax nycticorax naevius.—Black-crowned Night Heron. A large colony of these birds was formerly located in this vicinity, but after having been attacked many times by plume hunters and eggers, was finally broken up. I have no recent record of their having been seen in this section.

Rallus elegans.—King Rail. A nest containing eggs of this species was found in Great Swamp several years ago. It may breed regularly.

Rallus virginianus.—Virginia Rail.

Gallinula galeata.—Florida Gallinule.

Fulica americana.—American Coot.

Philohela minor.—American Woodcock. A rather rare summer resident.

Gallinago delicata.—Wilson's Snipe.

Macrohamphus griseus.—Dowitcher.

Actodromas minutilla.—Least Sandpiper.

Totanus melanoleucus.—Greater Yellow-legs.

Totanus flavipes.—Yellow-legs.

Helodromas solitarius.—Solitary Sandpiper.

Bartramia longicauda.—Bartramian Sandpiper. A very rare summer resident.

Actitis macularia.—Spotted Sandpiper. A rather rare summer resident, breeding chiefly in low-lying cornfields.

Charadrius dominicus.—American Golden Plover.

Oxyechus vociferus.—Killdeer.

Colinus virginianus.—Bob-white. Formerly common but now a rare summer resident. It seems to be increasing in numbers.

Bonasa umbellus.—Ruffed Grouse. Rare summer resident, though formerly common.

Zenaidura macroura.—Mourning Dove. Rare. Some years more common than others.

Circus hudsonicus.—Marsh Hawk. Permanent resident, common in some localities.

Accipiter velox.—Sharp-shinned Hawk. A very rare summer resident.

Accipiter cooperi.—Cooper's Hawk. A very rare summer resident.

Accipiter atricapillus.—American Goshawk.

Buteo borealis.—Red-tailed Hawk. Rare summer resident and becoming more so as the virgin forests are cut from the hills.

Buteo lineatus.—Red-shouldered Hawk. The most common Hawk breeding in this locality.

Buteo latissimus.—Broad-winged Hawk. Exceedingly rare summer resident.

Archibuteo lagopus sancti-johannis.—American Rough-legged Hawk.

Haliaeetus leucocephalus.—Bald Eagle.

Falco rusticolus obsoletus.—Black Gyrfalcon.

Falco peregrinus anatum.—Duck Hawk.

Falco columbarius.—Pigeon Hawk.

Falco sparverius.—American Sparrow Hawk. A not uncommon summer resident next to B. lineatus in point of numbers.

Pandion haliaetus carolinensis.—American Osprey. Common migrant.

Strix pratincola.—American Barn Owl. An extremely rare summer resident. I know of but one nest having been found. I also have a record of five young birds, not fully fledged, having been caught in a trap set in a pasture for hawks.

Asio wilsonianus.—American Long-eared Owl. Rather common at times, rare summer resident. About 35 seen in 1905.

Asio accipitrinus.—Short-eared Owl. Rare.

Syrnium varium.—Barred Owl. Formerly a rather common resident, but now rapidly disappearing.

Megascops asio.—Screech Owl. A not uncommon resident, but rapidly decreasing in numbers.

Bubo virginianus.—Great Horned Owl. Never common but now almost entirely exterminated from this locality. I doubt that a pair breeds within twelve miles of Summit. It has, however, been captured in early winter—December and January—in steel traps set on posts in the meadows near Summit, within the last two years, and it may still breed in the wilder portions of the country.

Cryptoglaux acadica.—Saw-whet Owl.

Nyctea nyctea.—Snowy Owl.

Coccyzus americanus.—Yellow-billed Cuckoo. A common summer resident; more abundant some years than others.

Coccyzus erythorphthalmus.—Black-billed Cuckoo. A rather common summer resident and as erratic as the preceding species.

Ceryle alcyon.—Belted Kingfisher. Rather common summer resident, nesting in all suitable localities.

Dryobates villosus.—Hairy Woodpecker. Less common than the next species.

Dryobates pubescens medianus.—Downy Woodpecker. A common resident.

Melanerpes erythrocephalus.—Red-headed Woodpecker. Locally common.

Colaptes auratus luteus.—Northern Flicker. The most common breeding woodpecker.

Antrostomus vociferus.—Whip-poor-will. Formerly a common summer resident. Heard several times the last of April and the first of May, 1906. Not seen nor heard hitherto for many years.

Chordeiles virginianus.—Nighthawk.

Chaetura pelagica.—Chimney Swift. An abundant summer resident.

Trochilus colubris.—Ruby-throated Hummingbird. Common.

Tyrannus tyrannus.—Kingbird. A common summer resident.

Myiarchus crinitus.—Crested Flycatcher. Rather common in woods.

Sayornis phoebe.—Phoebe. An abundant summer resident.

Nuttalornis borealis.—Olive-sided Flycatcher.

Horizopus virens.—Wood Pewee. Common summer resident in woodlands.

Empidonax flaviventris.—Yellow-bellied Flycatcher.

Empidonax virescens.—Green-crested Flycatcher.

Empidonax traillii alnorum.—Alder Flycatcher.

Empidonax minimus.—Least Flycatcher. A rather rare summer resident.

Octocoris alpestris.—Horned Lark.

Cyanocitta cristata.—Blue Jay. Abundant.

Corvus brachyrhynchos.—American Crow. Abundant.

Sturnus vulgaris.—Starling. Common in some localities.

Sphyrapicus varius.—Yellow-bellied Sapsucker. Common.

Dolichonyx oryzivorus.—Bobolink. Locally common. Apparently decreasing in numbers.

Molothrus ater.—Cowbird. Common.

Agelaius phoniceus.—Red-winged Blackbird. Abundant in the fresh water marshes.

Sturnella magna.—Meadowlark. Common.

Icterus spurius.—Orchard Oriole. Locally rare.

Icterus galbula.—Baltimore Oriole. Common, breeding in the heart of the city.

Euphagus carolinus.—Rusty Blackbird. Abundant.

Quiscalus quiscula.—Purple Grackle. Common. Breeds in colonies in conifers.

Quiscalus quiscula aeneus.—Bronzed Grackle.

Pinicola enucleator leucura.—Pine Grosbeak.

Carpodacus purpureus.—Purple Finch. Winter visitant.

Loxia curvirostra minor.—American Crossbill.

Loxia leucoptera.—White-winged Crossbill.

Acanthis linaria.—Redpoll.

Astragalinus tristis.—American Goldfinch. Common.

Spinus pinus.—Pine Siskin.

Passerina nivalis.—Snowflake. Rather common.

Pooecetes gramineus.—Vesper Sparrow. Common summer resident.

Passerculus sandwichensis savanna.—Savanna Sparrow. Common.

Coturniculus savannarum passerinus.—Grasshopper Sparrow. Very rare.

Ammodramus henslowii.—Henslow's Sparrow.

Zonotrichia leucophrys.—White-crowned Sparrow.

Zonotrichia albicollis.—White-throated Sparrow.

Spizella monticola.—Tree Sparrow. Abundant.

Spizella socialis.—Chipping Sparrow. Abundant in settled sections,

rare in rural districts.

Spizella pusilla.—Field Sparrow. Abundant summer resident.

Junco hyemalis.—Slate-colored Junco. Abundant in winter.

Melospiza cinerea melodia.—Song Sparrow. Abundant summer resident.

Melospiza georgiana.—Swamp Sparrow. Abundant summer resident.

Passerella iliaca.—Fox Sparrow. Common.

Pipilo erythrophthalmus.—Towhee.

Cardinalis cardinalis.—Cardinal. A rare summer resident. Only two or three records.

Zamelodia ludoviciana.—Rose-breasted Grosbeak. Common summer resident.

Cyanospiza cyanea.—Indigo Bunting. Common.

Spiza americana.—Dickcissel.

Piranga erythromelas.—Scarlet Tanager. Common summer resident.

Progne subis.—Purple Martin.

Petrochelidon lunifrons.—Cliff Swallow. Formerly common but now seems to have entirely disappeared.

Hirundo erythrogastra.—Barn Swallow. Abundant.

Iridoprocne bicolor.—Tree Swallow.

Riparia riparia.—Bank Swallow. Never very common.

Stelgidopteryx serripennis.—Rough-winged Swallow. A very rare summer resident.

Lanius borealis.—Northern Shrike. Rare.

Ampelis cedrorum.—Cedar Waxwing. A common summer resident.

Vireo olivaceus.—Red-eyed Vireo. Abundant summer resident.

Vireo flavifrons.—Yellow-throated Vireo. Rather rare.

Vireo solitarius.—Blue-headed Vireo.

Vireo noveboracensis.—White-eyed Vireo. Common along streams.

Mniotilta varia.—Black and White Warbler. Rather rare.

Helmitheros vermivorus.—Worm-eating Warbler. Rare.

Helminthophila pinus.—Blue-winged Warbler. Common summer resident.

Helminthophila chryspotera.—Golden-winged Warbler.

Helminthophila rubricapilla.—Nashville Warbler.

Helminthophila celata.—Orange-crowned Warbler.

Helminthophila peregrina.—Tennessee Warbler.

Helminthophila lawrencei.—Lawrence's Warbler.

Helminthophila leucobronchialis.—Brewster's Warbler.

Compsothlypis americana.—Parula Warbler.

Dendroica tigrina.—Cape May Warbler.

Dendroica aestiva.—Yellow Warbler. Common summer resident.

Dendroica caerulescens.—Black-throated Blue Warbler.

Dendroica coronata.—Myrtle Warbler.

Dendroica maculosa.—Magnolia Warbler.

Dendroica caerulea.—Cerulean Warbler.

Dendroica pensylvanica.—Chestnut-sided Warbler. Rather rare summer resident.

Dendroica castanea.—Bay-breasted Warbler.

Dendroica striata.—Black-poll Warbler

Dendroica blackburniae.—Blackburnian Warbler.

Dendroica vigorsii.—Pine Warbler.

Dendroica palmarum.—Palm Warbler.

Dendroica palmarum hypochrysea.—Yellow-Palm Warbler.

Dendroica discolor.—Prairie Warbler.

Dendroica virens.—Black-throated Green Warbler.

Seiurus aurocapillus.—Oven-bird. Commonest breeding warbler.

Seiurus noveboracensis.—Water-Thrush.

Seiurus motacilla.—Louisiana Water-Thrush.

Geothlypis agilis.—Connecticut Warbler.

Geothlypis formosa.—Kentucky Warbler.

Geothlypis philadelphia.—Mourning Warbler.

Geothlypis trichas.—Maryland Yellow-throat.

Icteria virens.—Yellow-breasted Chat. Rather common summer resident.

Wilsonia mitrata.—Hooded Warbler.

Wilsonia pusilla.—Wilson's Warbler.

Wilsonia canadensis.—Canadian Warbler.

Setophaga ruticilla.—American Redstart. A very rare summer resident. But one record.

Anthus pensilvanicus.—American Pipit.

Galeoscoptes carolinensis.—Catbird. Common summer resident.

Toxostoma rufum.—Brown Thrasher. Common.

Thryothorus ludovicianus.—Carolina Wren. A very rare summer resident. Only two records.

Troglodytes aedon.—House Wren. Rather common.

Olbiorchilus hiemalis.—Winter Wren.

Cistothorus stellaris.—Short-billed Marsh Wren. Locally common. Breeds in very restricted area.

Telmatodytes palustris.—Long-billed Marsh Wren. Locally common in fresh water marshes and along the Passaic river.

Certhia familiaris americana.—Brown Creeper.

Sitta carolinensis.—White-breasted Nuthatch. Common.

Bacolophus bicolor.—Tufted Titmouse. Rare, but becoming more common.

Penthestes atricapillus.—Black-capped Chickadee. Common.

Regulus satrapa.—Golden-crowned Kinglet. Common.

Regulus calendula.—Ruby-crowned Kinglet. Common.

Hylocichla mustelina.—Wood Thrush. Abundant.

Hylocichla fuscescens.—Wilson's Thrush. Rather common.
Hylocichla aliciae.—Gray-cheeked Thrush.
Hylocichla swainsonii.—Olive-backed Thrush. Common.
Hylocichla guttata pallasii.—Hermit Thrush. Abundant.
Merula migratoria.—American Robin. Abundant.
Sialia sialis.—Bluebird. Abundant.

ADDITIONS TO THE 'AUTUMN BIRDS OF THE LES CHENEAUX ISLANDS.'

BY WALTER C. WOOD.

In my list of the autumn birds of these islands published in the Wilson Bulletin No. 52, June, 1905, I enumerated 48 species observed between October 15 and November 15, 1903. I was again in this locality from November 10 to December 5, 1906, and noted the following additional species:

Canachites canadensis.—Canada Grouse. Several secured on the mainland opposite Marquette Island.

Accipiter atricapillus.—American Goshawk. Secured an adult male whose stomach was empty.

Archibuteo lagopus sancti-johannis.—American Rough-legged Hawk. Captain Pollock shot one a few days before my arrival. I found it an adult in fine plumage. When killed, it was flying from the chicken yard with a full grown domestic fowl in its talons.

Syrnium varium.—Barred Owl. Often seen in the thick cedar swamps.

Parus hudsonicus.—Hudsonian Chickadee. Appeared with the first heavy snowfall, November 25, when a few were seen. They became very common by the 28th, and Captain Pollock informs me that they are the most abundant winter bird and very tame; in fact, more so than atricapillus, and more often come about the house and feed from the door-step.

SPECIAL INVESTIGATIONS.

Our cooperative investigations have moved very slowly indeed the past year. Perhaps this is due in part to the delay in mailing the blanks. Out of several hundred blanks distributed but half a dozen have been returned. Acknowledgments are due to the following persons:

Mr. O. M. Schantz, Illinois, for reports on American Robin.

Mr. T. A. Eliot, Jr., Maine, for reports on Chickadee, Rose-breasted Grosbeak, Song and Vesper Sparrows.

Mr. Henry Lusk, Iowa, for reports on Song and Vesper Sparrows.

Blanks are being mailed with this number of the Bulletin, and it is hoped that all receiving them will make some earnest efforts to fill as many as possible as completely as possible this season. Additional blanks can be had for the asking. The field we are trying to cover is practically a new one and too much attention cannot be given it from the standpoint of original observations and personal pleasure and profit it affords. The back of the sheet may be used for further notes—the more the better. FRANK L. BURNS, *Berwyn, Pa.*

The Special Report on the Broad-winged Hawk (Buteo platypterus) nears completion as far as my own personal efforts are concerned; but there are probably thousands of references lurking unused in hundreds of notebooks which would be of the highest value collated, and perhaps valueless by themselves. I don't see how you can satisfy your conscience with respect to your service to science if you simply bury the results of your labor and study in a notebook. Now is the time to dig some of it up, assemble it, correct errors, examine specimens, and I can assure a hearty welcome to all coming my way.

In addition to information relating to distribution, migration, food, breeding, and general habits, plumage, etc., I need photographs, exact nesting data on location, position and composition of nests; number, size, and description of eggs; dates, incubation, and would be grateful for names of authors, titles and abstracts of little known published references in this country or abroad. May I not count on you for a blank filled out with exact breeding data of this bird? It would be well worth all the trouble for the personal information and experience received. FRANK L. BURNS, *Berwyn, Pa.*

THE WILSON BULLETIN.

A Quarterly Magazine Devoted to the Study of Living Birds.
Official Organ of the Wilson Ornithological Club.

Edited by LYNDS JONES.

PUBLISHED BY THE CLUB, AT OBERLIN, OHIO.

Price in the United States, Canada and Mexico, 50 cents a year, 15 cents a number, postpaid. Price in all countries in the International Postal Union, 65 cents a year, 20 cents a number. Subscriptions may be sent to Lynds Jones, Oberlin, Ohio, or to Mr. Frank L. Burns, Berwyn, Penn.

EDITORIAL.

The editor desires to especially commend to you the calls which Mr. Frank L. Burns makes for assistance elsewhere in this issue. No words of mine are needed to add to the assurance that whatever aid may be given to Mr. Burns will be properly credited and used in the most effective manner, for the report on the Crow and the Monograph of the Flicker amply attest what he can do with any material which may come into his hands. I am certain that contributions for this cause will rebound to the credt of the contributor. Don't delay. Get what notes you now have ready at once and send them in, and plan for the collection of more and better notes in the year that is before you.

Letters from many places in the middle west indicate a marked scarcity of many of the common winter birds. In Ohio this scarcity has been so marked that usually unobservant editors of local papers have remarked upon it n their columns. There appears to be no good reason for this scarcity n ilocal conditions nor in the character of the season. Food of nearly all kinds seems to be in the usual quantities. It would be very interesting to gather notes upon the condition of the bird faunas of the whole country for comparson to determine if there is any general diminution of numbers, or if there are particularly favored and particularly unfavored regions. The editor would be glad to receive such reports for study, correlation, and report in the Bulletin.

The editor's attention has ben called to his article in the last number of the Bulletin regarding the list of Birds of Cleveland and his own observations in Erie County, Ohio, and he is glad to make corrections at

this time. The statement that the Piping Plovers of this region are without a complete breast band is an unpardonable slip, for they certainly do. Since the King Eider is found not uncommonly on Lake Ontario, and is an open water bird, it may well be that it may be found in some number in the lake off rfom Cleveland. It seems that the specimens of Snow Goose from Detroit and that vicinity are of the Lesser type. Of course the observation recorded was merely a record made with a high-power field glass and subspecific distnctions of the fineness presented by these geese was out of the question. It could only be determined that the birds were Snow Geese.

In Mr. F. H. Hall's article in the last Bulletin on Adirondack birds Mr. Eaton was quoted as stating that human occupancy is a menace to the bird life of those regions. It appears that the source of Mr. Hall's information was a misquotaton of Mr. Eaton, who made a public correction of the statement which had come to the notice of Mr. Hall. Mr. Eaton agrees very closely with Mr. Hall's observations.

GENERAL NOTES.

A GOLDEN EAGLE IN MIAMI COUNTY, OHIO. The rare occurrence of the Golden Eagle (*Aquilla chrysætos*) east of the Mississippi River justifies the publication of any such records. On November 3, 1905, a fine adult female was captured about five miles of Troy, Miami county. It could not fly owing to a broken wing received from a shot wound received sometime previous. The bird was kept alive for two months and a half in the hope that the wing might recover, but since the humerus was broken in two, and although nature heroically endeavored to repair the fracture by putting out great knots of bony tissue on the broken ends, the effort was futile. The bird persistently picked off all bandages for the support of the broken wing. During its captivity we fed it beef, with an occasional rabbit. It could dispose of a rabbit in a remarkably short time. The confinement did not seem to affect its appetite, for that never failed. It was very attractive on account of its general beauty, but especially on account of the brilliance of its hazel-brown eyes. We were further interested to observe that it did not defend itself with its hooked bill but with its powerful talons. It was identified by an old taxidermist as a young Bald Eagle, but the entirely feathered tarsus proclaimed it a Golden Eagle beyond doubt, to say nothing of the cowl of golden-brown feathers and the fact that the basal two-thirds of the tail was white, and the outer one-third was very dark brown. Finally realizing that the wing would not heal, and knowing that there must be a

great deal of pain from the compound fracture, we chloroformed it, and now its mounted skin graces the taxidermy collection of the Troy High School. G. C. Fisher.

Troy, Ohio.

An Oven-Bird at Sea. August 30, 1906, when the fast French steamer La Province, enroute from Havre to New York, was about 200 miles from Nova Scotia, an Oven-bird (*Sciurus aurocapillus*) flew alongside for quite a while, apparently wanting a place to rest but afraid of the many passengers on the decks. The ship's latitude and longitude were 42, 09, 5 N.; 62 17 W. Shortly after noon on coming on deck from the dining room I saw the bird and watched it for nearly half an hour. It kept within a few yards (probably five or ten yards) of the ship. Sometimes it would drop back a little, and we wondered if it were not exhausted. A passenger who was on deck while I was at dinner said that while the bird was still alongside he had been watching it for an hour. After this I lost sight of it and supposed it was unable to keep up, but after an interval of about an hour I saw it again (presumably the same bird) and watched it for ten or fifteen minutes. It is quite possible that for a time it was resting somewhere on the ship. The weather was fair and there was no apparent reason for its flying so far from land. E. L. Moseley.

A Brown Creeper's Spiral Flight. During the mating season one often catches glimpses of love-making among birds. At this time the male is frequently seen in playful pursuit of the female who, by short flights, leads him from limb to limb and tree to tree. It was on March 9, 1904, in the valley of Darby Creek, Delaware county, Pa., that I saw two Brown Creepers engaged in this game of tag. In my experience the Brown Creeper always alights near the base of a tree trunk and then works upward, his course being a spiral one—he travels round and round as he climbs upward. In the pursuit I speak of this same program was carried out, only instead of climbing up the trunk the birds would fly up. They alighted near each other upon the tree, then number one would take wing and fly upward, describing one or two complete spirals about the trunk and again alight upon it with number two following in close pursuit. To travel in a spiral course seemed to be such a well formed habit that they could not get away from it. It was not simply a chance flight, for I saw it repeated again and again. Chreswell J. Hunt.

Cedar Waxwings as Sapsuckers. Toward the end of March, 1906, a sunny spot along the south wall of Blair Hall was frequented

daily by a varying flock of Cedarbirds, sometimes fifty or more, a few Bluebirds, several Robins, and a couple of Juncos. The abundant ivy berries were the principal attraction. My rooms were a little further than across the street from this spot. Directly in front of the house were several maples and on one of these two or three twigs nearest my windows and a trifle lower were broken and dripping. The Waxwings discovered this and several times I noticed two of them busy at these twigs while two or three others sat patiently awaiting their turn. A careful examination with field glasses at that close range showed them to be drinking sap. Their motions were those of drinking. I could see no small insects there, and even if there had been the Waxwings could have cleaned them up in a few minutes, but they were busy there for long periods. I never saw any of the other species follow the Cedarbird's example. While my first two Waxwings for the year were seen on March 18 out in the country, all that I saw after that date for several weeks were in town, the first flock of fifty appearing March 30.

Princeton, N. J. CHARLES H. ROGERS.

NOTES ON CHESTER COUNTY, PENN., BIRDS FOR 1905. King Rail (*Rallus elegans*). A female was captured by some school boys, May 4, near Howelville, one mile north of Berwyn. It had been wounded, probably the same day, and not recovered by the hunter. The boys discovered it and ran it down. It is possible that it might have bred in the locality as the ovaries contained several partly developed eggs.

American Coot (*Fulica americana*). On November 1, a male was found dead near Green Tree, probably having flown against the telegraph wires.

Bartramian Sandpiper (*Bartramia longicauda*). On the evening of August 18, I received an immature female probably of a local brood, which was secured the same day in the Chester valley, one mile north of this place. Owing to the growing scarcity of this bird in this locality it is worthy of mention. FRANK L. BURNS.

Berwyn, Pa.

TWO MORE BARN OWL (*Strix pratincola*) RECORDS FOR SENECA COUNTY, OHIO. On the morning of August 30, a woman came to my house to have a Barn Owl mounted which was shot on the previous day about five miles north of Tiffin. A few weeks later a local photographer showed me a photograph he had taken two years ago of a Barn Owl which had been shot at Green Springs at the north-eastern end of the county and mounted then and there. Being unfamiliar with the name of the bird he asked me

for information. These make the fifth and sixth records for this county. Rev. W. F. Henninger.

A Brant at the Lewistown Reservoir. On March 29, 1905, a Brant was killed at the Lewistown Reservoir, Logan County, Ohio. Having no other key except Chapman's *Handbook*, I identified it as *Branta bernicla* (Linn). But, since Chapman does not describe the subspecies, *B. b. glaucogastra* (Brehm), I am not now sure which it was. It is possible, as Dawson suggests, that it was tne latter, that is, the White-bellied Brant. G. C. Fisher.

Mockingbird (*Mimus polyglottos*) at Grinnell, Iowa. One was observed from October 29 to November 4, 1906, by Mr. Will Staat and others. Prof. H. W. Parker, in American Naturalist, Vol. 5, No. 3, 1871, records specimens seen June 25, August 4, and October 21, at Grinnell. Aside from these I know of no instances of its occurrence in central Iowa as far north as 41 44. J. L. Sloanaker.

The Dickcissel in Wayne County, Mich. In the Wilson Bulletin No. 53, December, 1905, I gave an account of Dickcissel here up to the year 1906. During the latter season I was so fortunate as to again meet with the species and found two nests. The territory where these birds were found was carefully explored in May, so I feel certain that the male discovered on June 10, was the first arrival. After that date an occasional male was heard singing, but I could not spare the time to investigate, being fully occupied with Henslow's Sparrow and Short-billed Marsh Wren. The first female Dickcissel was noted on June 24. It was not until July 29 that I could give the species proper atention. Two pairs were located, one on Private Claim 618, village of Grosse Pointe Farms, and the other on P. C. 404, Grosse Pointe Township. The female of the latter pair was watched to her nest, which was placed about six inches above the ground in a thick tangle of grape vines at the base of a dead apple-tree in an abandoned orchard, and it contained three young, which were gone August 5. I succeeded in locating three more pairs and found a nest containing three eggs. This nest was in a hawthorn bush two feet from the ground, and was well concealed by thick weeds. One of the eggs was about to hatch, and the remaining two were addled. My next visit was on September 3, but the birds had disappeared. J. Claire Wood.

Catharista atrata, Black Vulture, in Harrison County, Ohio. Through the kindness of Mr. Harry B. McConnell, of Cadiz, who made the identification, I learn of the occurrence of the Black Vulture five miles north of Cadiz. The bird was shot on December 17, 1906, by Homer Moyer, who mistook it for a hawk. The bird was only winged, but so strenuously resisted being taken alive that it was shot a second time and killed. The specimen reached me more than a week later, but was then

in an impossible condition. The wings were saved after identification had been made certain. This is the farthest north that this species has been taken in Ohio. A resume of the Ohio occurrences may prove of interest.

Audubon was the first to record it in 1840, Birds of America, p. 17, for the region of Cincinnati. This record was quoted by Kirkpatrick, Brewer, Wheaton, and Coues, but the next record was made by Dr. Frank Langdon in Bulletin of the Nuttal Ornithological Club, Vol. 2, p. 109, 1899. Dr. Langdon saw three birds feeding upon carrion near Madisonville, one of which he wounded and was afterward probably captured by Edwin Leonard on January 1, 1877. Dr. Langdon saw the birds on December 20, 1876. Mr. R. W. Smith recorded a pair near Lebanon, December, 1883. This record, together with the statement that it is now a regular summer resident in Warren county along the Little Miami and Caesar's Creek hills, was published in the Journal of the Cincinnati Society of Natural History, July, 1891, p. 113. Mr. Oliver Davie took a specimen four miles north of Reynoldsburg on February 6, 1895. It is curious that the northward occurrences are all during the winter months.

LYNDS JONES.

Ring-billed Gull, Larus delawarensis, in Central Ohio. In the taxidermy rooms of Mr. Thos. M. Earl, of Columbus, I found two specimens of this species. They are now in the Oberlin College collection. One is full plumage, and was shot by a hunter on the Licking Reservoir on April 15, 1906; the other is an immature bird, and was shot at the same place on October 15, 1906. Another bird was shot on the latter date and is now in a local collection in Columbus. There are so few recent records of this species in Ohio and Michigan that I was led to question earlier records of their commonness on Lake Erie. Certainly in my experience the species has been all but unknown in Ohio.

LYNDS JONES.

"THIS IS THE FOREST PRIMEVAL"

The scene of some of Walter J. Hoxie's work.

By him.

THE
WILSON BULLETIN

NO. 59.

A QUARTERLY JOURNAL OF ORNITHOLOGY

VOL. XIX JUNE, 1907. NO. 2

THE BIRDS OF POINT PELEE.

BY P. A. TAVERNER AND B. H. SWALES.

INTRODUCTION.

The following report is mostly compiled from the notes of the members of the Great Lakes Ornithological Club, a small organization formed for the purpose of co-operation and intensive study of the birds of the Great Lakes Region. At one of the earliest meetings of the club attention was called by W. E. Saunders to the peculiarly interesting phases of Point Pelee avifauna, and the interest of the membership was so aroused that a trip was made there May 13 and 14, 1905, by W. E. Saunders, B. H. Swales and P. A. Taverner. The results were so encouraging that further and more extended trips have been made as business conditions permitted. The following are the fruits of the work to date. Credit must be given to the following members, who have aided the writers to the utmost in their endeavors to present all the data so far accumulated in regard to the birds of this interesting locality.

Dr. William Brodie, who made a collecting trip to the Point in July, 1879, and added some valuable notes in regard to conditions at that early date.

Mr. W. E. Saunders, of London, Ont., who made various trips during and after 1884, and has added several species that do not seem to occur there now or that the rest of us have failed to find, besides many other notes whose value will appear

in the following text. Not the least of our indebtedness to this gentleman arises from the fact that he first introduced us to Point Pelee.

Mr. J. E. Keays, who accompanied the above on many of his early trips and made another rather extended one in the fall of 1901.

Mr. A. B. Klugh, of Kingston, Ont., who accompanied the authors on a two weeks expedition the first of September, 1905, and to whom special credit must be given for all the botanical notes, besides others of more direct ornithological interest.

Mr. J. H. Fleming, who accompanied the writers May 20 and 21, 1906, to the Point and who succeeded in making the rarest record for the locality.

Dr. Lynds Jones, who, stationed on the Islands, co-operated with us on the Point in early September, 1905, and furnished valuable data as to the actions of migrants as they passed over the lake.

And lastly, though not least, to the various residents on the Point whose good will and kindness made our trips, if not possible, at least comfortable; and among these especially to Mr. Albert Gardner, whose information on various birds we have found most reliable and valuable, especially in regard to the water fowl, of which it is most difficult to gather data on short and desultory trips.

That the work is far from complete will be evident from the numerous gaps that exist in the list, that we have so far been unable to fill from actual observation or reliable report. We have allowed consistently the rule of admitting nothing, except absolutely positive evidence, without giving the grounds for our conclusions that the reader can judge their weight for himself. In nearly all cases specimens have been taken or examined by the writers and in all important records the location of the specimen has been definitely determined so that the identifications can be at any time verified. Many of the shortcomings of the list must be charged against the intermittent character of the work done at the Point and that this may be duly allowed for we append the list of visits made

to the locality, by the writer, upon which the bulk of the work rests.

May 13, 1905, W. E. Saunders, B. H. Swales and P. A. Taverner tramped out the east shore, camped in the red cedar belt on the opposite side and beyond the end of the marsh and returned along the west side road the next day.

Sept. 5 to 17, 1905, A. B. Klugh and Taverner formed a camp about the same place as before, from which point they worked all localities of interest carefully. Sept. 8 they were joined by Swales, who remained until the 13th. Camp was broken the 17th.

October 29, 1905, Taverner made a survey of the east shore.

May 20, 1906, J. H. Fleming, Swales and Taverner drove out to the old camping grounds, worked the end of the Point and a bit of the east shore, returning the next day along the road on the west side.

Sept. 1, 1906, Swales and Taverner worked the country around the end of the marsh and towards the end of the Point and returned Sept. 3.

Sept. 15-22, 1906, Saunders, Swales and Taverner camped in the usual place and worked the end of the Point thoroughly and spent considerable time on the marsh and ponds.

Oct. 14, 1906, Swales and Taverner covered the end of the Point, returning the next day along the east beach, working the Lake Pond on the way.

March 9, 1907, the same two put in two days about the end of the Point.

May 31, 1907, Saunders and Taverner tramped out the east beach and camped on the old grounds, worked the end of the Point and the beaches, returning June 1.

PHYSICAL AND ECCOLOGICAL DESCRIPTION.

Point Pelee is near the western end of Lake Erie, projecting into those waters some nine miles or so from the northern or Ontario shore. It is the most southern point of the mainland of the Canadian Dominion and offers many features of peculiar interest to the student of ornithological distribution. In shape it resembles a large "V" with concave arms flaring

rapidly at the top where it merges into the general trend of the main shore and attains a width of about six miles. This resemblance to the letter is more than superficial, and a closer examination carries out the likeness farther than is apparent from its outline shape alone. The general aspect is that of two long, low sand-bars meeting at the apex where they are amalgamated for a little over two miles of their length, and from thence stretching out in divergent parabolic lines to the main shore. The triangle so inclosed from the point of juncture back to the mainland is swamp of varying degrees of wetness, some places being quite firm and wadable, but others are quaking bogs that render such a proceeding a ticklish undertaking. In several places the marsh deepens into ponds, some being of considerable size.

The marsh itself is largely composed of the following plants: Cat-tail, *Typha latifolia;* Narrow-leaved Cat-tail, *Typha augustifolia;* Wild Rice, *Zizania aquatica;* Reed Grass, *Phragmites communis;* and Lake Bullrush, *Scirpus lacustris.* Of the ponds, those known as the Lake Pond and the Cove Pond are the principal and largest. These are of no great depth and their bottoms are composed of successive generations of aquatic plants and are soft and treacherous. The Lake Pond contains great masses of Wild Celery, *Vallisneria spiralis,* which, with the Wild Rice that grows plentifully and to great size about its shores, offers great inducements to the wild fowl that visit the locality in large numbers during the migrations. German Carp that are said to be common are not nearly as numerous here as at the St. Clair Flats nor have they done the damage that they have at the latter place where the punters claim they have almost entirely exterminated the native Wild Celery.

Across the base of the Point and cutting off a considerable portion of the marsh, a wide ditch has been dug from shore to shore and the material excavated heaped up on the outer side to form a dyke. On the eastern shore a pumping station has been erected and the water is raised from the inner side and thrown out into the lake, thus reclaiming several hundreds of acres of rich swamp land to agricultural use. The debris

taken from the excavation is a stiff blue clay giving an indication of the underlying strata upon which the superficial structure of the Point is built. On top of this clay there are, in places, from two to three feet of solid peat showing in the vertical faces of the cut.

The eastern shore forming the right hand arm of the "V" is very simple in character, being composed of but a single sand-dune, bare of vegetation except for a meager covering of zerophitic plants and a few scattered cottonwoods. Out beyond the end of the marsh where the two arms join, the forest growth of the opposite shore encroaches on the east side until their roots are almost washed by the waves of the lake. The average width of the dune for the greatest part of its length is but a hundred yards and in some places rises to a height of ten feet above the lake, though in others it is so low that, during storms when the wind is in the right direction, the waves wash completely over the slight sand barrier into the marsh beyond. The plant life is typical of such places and is composed of Sand-drop-seed, *Sporobolus cryptandrus;* Knot-weed Spurge, *Euphorbia polygonfolia;* and Tall Wormwood, *Artemisia candata.* Several scattered clumps of Cottonwood mentioned before occur on the crest, and patches of Sea Sand-reed, *Ammophila arundinacea,* and Smooth Panic Grass, *Panicum virgatum.*

Just above high water mark the dune rises rather abruptly, especially towards the base of the point, forming a fairly well marked bluff, and then gradually sinks away into the marsh on the other side, upon which it is evidently encroaching; as between the sand and the bog societies there is usually a long narrow strip of clear water where the blowing sand has smothered the aquatic plants without filling the space up to the water level. In fact there is every evidence that this shore is being eroded, and the time is not very far in the future when Point Pelee will be washed bodily away unless present conditions change or man devises some way in which to stay the natural course of events. The older residents say that some forty years ago this shore was nearly three-quarters of a mile wide and clothed with heavy hardwood timber. Even

since our first visit in May, 1905, we can see that the Point has lost considerable land along the shore, nor have we observed that there have been any compensating accumulations made at other points on this side. The fishermen tell us that the bottom, off shore, is composed of mud, and filled with roots and prostrate tree trunks. On the beach every here and there are often found large regular masses of peat that seem to have been torn up from the bottom and washed ashore in the same manner that Prof. E. L. Mosely describes having taken place immediately across the lake on the Ohio shore at Cedar Point.*

The western side shows an entirely different aspect. Near the base, between the marsh and the lake, it is narrow, barely allowing room for running a road along its length, but as it proceeds outward towards the end of the Point it gradually widens until, beyond the marsh, the two sides of the "V" join and give a width of about half a mile. From the base, on the west side to this point, and all beyond is heavily wooded with deciduous and evergreen trees. Black Walnut, *Juglans nigra*, is one of the most conspicuous species of the former and Red Cedar, *Juniperus virginiana*, of the latter. In fact, these two with Juniper *Juniperus communis*, are the species that give the most striking character to the floral aspects of Point Pelee. Here and there a tall White Pine, *Pinus strobus*, towers up among the other growth or, as in one or two cases, unite to form piney groves. The extreme end of the Point is covered with a heavy growth of Red Cedar in clumps filled in between with great beds of Juniper. This growth mixed with Snowberry, *Symphoricarpus racemosus*, continues down the Point in a sharply defined belt between the beach in front and the deciduous woods behind. A few Red Cedars, however, occur scattered through the woods all along the shore, and in the more barren places inland, where also the Western Prickly Pear, *Opuntia rafinesquii*, flourishes. This western shore, moreover, does not seem to be suffering from erosion as is the eastern. In fact it seems

*Proceedings of the Ohio State Academy of Sciences, 1904, p. 212.

to be growing and extending into the lake. The beach is very wide and of a gentle, even slope and the woods behind seem to be extending their ground over its surface as it encroaches on the lake. It is worthy of notice, in this connection, that large masses of driftwood and other debris is cast up on this shore, while the eastern is perfectly clear except for the masses of peat spoken of before. A road runs out the Point just within the shelter of the trees on this side. Between the road and the lake it is still Crown Land, and so, but for the effects of stray cattle and hogs, is nearly in its primeval state. Beyond the road, however, are farm lands wherever there is room between it and the marsh for cultivation. Beyond the marsh and extending towards the point is woodland composed chiefly of Chestnut Oak, *Quercus primus;* Red Oak, *Quercus rubra;* Black Walnut and Button Wood, *Platanus occidentalis.* In the center of this woodland are extensive fields, both cultivated and waste, some more or less grown up with thickets of Hackberry, *Celtis occidentalis;* White-heart Hickory, *Carya tomentosa;* young Black Walnut, Red Oaks and Chestnut Oaks; Climbing Bittersweet, *Celastrus scandens;* Wild Grape, *Vitis riparia;* Carrion Flower, *Smilax herbacea,* and Prickly Green-briar, *Smilax hispida.*

It will be seen from the foregoing that the Point offers inducements for all classes of birds. There are the hardwood forests, cedar thickets, brushy tangles, high and low waste lands, open fields and marshes of all degrees of wetness for a varied avifauna: nor have the conditions promised more than later results have fulfilled as the accompanying list shows. But, before proceeding, it seems desirable to call attention to phenomena of peculiar interest in regard to the avifaunal and other aspects of the Point biota.

The beaches on either side are perfect, wide and clear and of themselves seeming to offer equal inducements to waders; in fact, what choice there is would seem to be in favor of the western one where materials of food value must be constantly washed up. The contrary, however, is the case. We have seen no waders but Spotted Sandpipers on this beach, though Saunders states that on his earlier trips he saw Black-bellied

Plover there. The neighboring marshes on the east side may be the determining factor or the presence of the ponds that, on the east side, wash the inner line of the shore dune in some places, and are not separated from the beach by a belt of timber as on the west. There are many indications, however, that the preference is largely governed by the migrational routes taken by these migrants in approaching and leaving the Point. Just such a condition of affairs would be exhibited if the waders on the fall migration approached the Point from the east side and so along that shore and leaving at the extremity; reversing the route in spring. Such seems to be the course of the Sharp-shinned Hawk flight and what data we have of the distribution of waders on the north shore of Lake Erie seems to substantiate the theory. Gulls and Tern show a less pronounced preference for the same shore but perching birds, as would be expected, are almost absent from it except at such times as described by the residents during the latter part of May, 1907, when, after prolonged interruption of migrations by unseasonable weather, the sparsely sprinkled Cottonwoods scattered along the eastern shore were alive with tanagers and warblers. At other times we have found but such typical species as Savanna Sparrow, Prairie Horned Larks, Palm Warblers and a few White-crowned Sparrows, and late in the season, Snowflakes and Pipits. Practically the same conditions prevailed during all our visits.

The most interesting feature of the Point ornithologically, however, is the intrusion of Carolinian forms of life. This is backed up and supported by the botany as noted by Mr. A. B. Klugh, who says:

"The floral aspect of Pelee is decidedly Carolinian as is shown by the occurrence of the following plants: Sand Grass, *Triodia purpurea,* Summer Grape, *Vitis aestivalis,* Wiry Panic-grass, *Panicum philadelphicum,* Swamp Rose-mallow, *Hibiscus moscheutos,* Florida Milkweed, *Accrates longifolia,* Button-wood, *Platanus occidentalis,* Black Walnut, *Juglans nigra,* White-heart Hickory, *Carya tomentosa,* Sassifras, *Sassifras officinalis,* and Chestnut Oak, *Quercus prinus.*"

How far these conditions, peculiar for Canada, prevail in-

land we are unable to tell. We have found slight Carolinian indications in the bird life along the lake shore as far as Amherstburg to the west. About Leamington, a few miles inland, they are able to raise crops of sugar cane, while tobacco flourishes throughout the region. The Point itself, however, is specially favored by the seasons for, though the spring is some two weeks later than even in the country about Leamington, it more than makes up for that by being absolutely free from late spring frosts, and having almost a month more free from frost in the fall. The results of this are well seen this spring, 1907, when the peach crop on the mainland promised to be almost a total failure, many entire orchards being actually killed, while on the Point itself the trees promise the greatest crop they have ever known. A few such occurrences as this must have a most decided influence upon the biota and explain why so many species are found in but this one locality in the Dominion.

On looking at the map of Lake Erie, Point Pelee, stretching out into the lake, the great arm of Ottawa Co. reaching an equal distance from the opposite Ohio shore, and the islands lying like stepping-stones between seem to constitute a natural migrational highway across the lake. Special attention has been given to this appearance and the results seem to justify our surmises. Dr. Lynds Jones was stationed on the islands during the first of Sept., 1905, and describes the migrational conditions he observed in these words:

"I found the birds migrating practically everywhere along the line of the islands, but the largest and best defined stream was across Pelee Island, with a well marked convergence to its southern point, thence across to Middle, and beyond to Kelly's Island, thence across to Marblehead. Migrating birds were most numerous on Middle Island, but they were in great numbers on Pelee (Island). No birds were seen crossing the lake except in a line with the islands."

This last statement is important for it shows that, though Lake Erie is not very wide at any point, the generality of small migrants prefer an easy passage from island to island to launching directly out and making the crossing

at one flight. We say the "generality" with reason, for some species we have seen crossing directly over, undeflected by the inviting appearance of Pelee Island that lies in full view from the end of the Point and about eight miles and a half away. The birds we have seen so crossing were Duck Hawk, Sharp-shinned Hawk, Sparrow Hawk, Red-winged Blackbird, Bronzed Grackle, Blue Jay, Robin, and Bluebird. We noted all of these species crossing the afternoon of October 14, 1906. On that date this was of more than common interest as it showed migration at a time when such movements are difficult to detect. Ordinarily with individuals coming and going daily there is no appreciable increase or diminution of numbers of a species. Under such conditions it is almost impossible to tell positively whether the bird population is migrating or stationary. But here it is possible to actually see such species start out and feel certain that it is a migration flight and not but a passage to another woods or swale, and accidentally in a southerly direction. From the first of September on, every morning's sunrise sees great flocks of Blackbirds and Bobolinks that have presumably passed the night in the marsh making their way down the Point for the crossing. Through the day it is but an occasional small bunch that passes over, but from sunrise to about eight o'clock they go in an almost steady stream. Sharp-shinned Hawks, on the contrary, seem to wait until they have digested their morning meal before starting out and then seem to cross throughout the day in steady numbers.

There is one species, however, that does seem to take advantage of every resting place along the way, and that is the Ruby-throated Hummingbird. This diminutive little bird showed a strange mixture of bravery and caution. Other birds hesitate more or less before finally leaving the Point and then fly at an elevation of about two hundred feet or more. As they start out from the shelter of the last trees the least thing will turn them back, a man shouting, a gun shot or the sight of a hawk in the far distance. In this manner they may make several false starts before the final one. The Hummingbird, however, comes sailing down the Point over the tops of

the last shrubbery and then dropping down to within a few feet of the sand follows its curves and windings out to its most extreme tip when, squaring away at an angle to its flight of a moment ago, it makes straight for Pelee Island. We saw this many times, nor did they once hesitate or pause from the time when they first hove in sight over the bush tops until they faded away in the field of our glasses over the waters of the lake. Contrary to other species noted, they flew low, and according to Dr. Jones, who saw them from a boat out in the lake, they kept, as much as possible, low in the trough of the seas to escape the wind pressure of higher levels.

In most localities in this region fall birds, even in the height of the migrations, are generally rather hard to find. They cruise along in bunches often of many individuals and species. When such companies are found birds are to be seen all about, but soon the host has passed on and the woods are comparatively deserted until another such company is found. During the height of the fall migrations, the last of August and the first of September at Point Pelee, however, the conditions are much different. The birds are in a flock but one might say that it occupies the whole Point. Sometimes, wherever one turns many individuals are in sight and one is bewildered by their numbers. Then some night we hear the "cheeps" of migrants high in the air and the next morning the multitude will be gone and, with the exception of some few species, birds will be hard to find. Then again, they will gradually increase till they reach their maximum numbers and again vanish. In fact, the whole history of the fall migrations at the Point seems to be a series of gradual augmentations and sudden diminutions of bird life, as though the migrants continue to arrive until certain conditions have been fulfilled or a degree of saturation of bird life had arrived and then all leave in a body. About one-third of the way from the Point to Pelee Island, but some miles to the east of the direct line, there used to be a light-house that is now deserted. It was kept by a man by the name of Grubb, who told us that at times great numbers of birds used to become dazzled by the glare of the light, and striking the glass of the

lantern fell struggling to the stage below. Many of these were killed outright, but he says that sometimes he would gather up the stunned ones and carry them inside and has had more than a hundred flying about his small quarters at a time.

As far as we can see, the night departures of birds in the fall are made almost independent of the weather. Several times we congratulated ourselves that the night was too bad for birds to leave the Point and cross the troubled waters of the lake and that the next day we would have a chance to see some rare species again only, when morning dawned, to find that we were to be disappointed and where birds were abundant the day before they were scarce then. This latter fact is easily explainable on considering the short flights from island to island and the number of havens of rest offered should the weather prove too unpropitious.

Usually, companies of migrating birds seem to be moving in given and definite directions and one acquainted with the ground can often locate a group again after it has once passed. On Point Pelee, however, they seem to move erratically about, sometimes traveling up and sometimes down the Point. They seem to have reached the end of their land journey and have nothing to do but kill time until they are ready to take up their next stage across the water.

These facts stand out plainly in our work on Point Pelee: the evident "wave" form of the migrations, the great congestion of bird life during migrations, their erratic wandering while on the Point in the fall and their departure, as far as we could see, regardless of weather.

All these facts point to the conclusion that here is the contraction and consequent condensation of a great migration route and the congestion of bird life in spring and a few days in the fall suggests the great area of territory to the north that must be supplied in the spring and drained in the fall of its birds by this stream. The occurrence of so many rarities within a small locality is also interesting and suggestive, showing how such wandering waifs "follow the crowd" and progress along routes unknown to their ancestors and along these highways sometimes establish permanent homes in new

territory, as in the cases of such intrusive forms as Cardinal, Yellow-breasted Chat and Carolina Wren that have formed permanent settlement here. In studying out the problems presented it is well to bear in mind the fact that Prof. E. L. Mosely seems to have conclusively prooved that within almost historical times there was land connection broken but by marshes and streams of comparatively narrow width between the Ohio and Canadian shores.

Taken all together, the bird life of Point Pelee, the islands adjoining and the opposite American shore forms a subject of absorbing interest and ground where migrational phenomena of the Great Lakes can perhaps be studied to better advantage than anywhere else in this section. There are many such problems that seem to have a glimmer of light thrown on them from work done here and should results warrant they will form the grounds of subsequent papers. As a basis for such future work and as a matter of present record the following list is put forth by the authors:

A LIST OF THE BIRDS OF POINT PELEE.

1. *Colymbus auritus*,—Horned Grebe.

Without doubt a regular spring and fall migrant as at Detroit, Mich. Two seen on the Lake Pond, October 15, 1906, and listed by Harry Gould (Ottawa Naturalist, Vol. XV, 1901, p. 16), September 19, 1900.

2. * *Podilymbus podiceps*,—Pied-billed Grebe.

A common migrant and undoubtedly a regular breder in considerable numbers. We have not observed it as yet in the spring during our May visits, but at these times little marsh work was done and they could easily have been overlooked. The species increases in abundance from early September and are common by the middle of the month on the ponds, though we have yet to see it on the Lake. They were very common during October, 1906, and appear to remain until driven out by the formation of the ice. In 1905 there were still numbers to be seen October 29.

3. * *Gavia imber*,—Loon.

Mr. Saunders found a nest during the first week in June, 1884, near the west side of one of the ponds and remarks, "They were then

* Species so marked have either been taken by the writers or specimens have been examined by them personally.

known to breed there annually." This species seems to have suffered the same fate here as it has in the adjoining localities, and from a common breeder has been reduced to the position of a regular migrant, becoming rarer before the encroachments of civilization. We have observed single birds at Pelee at various times and the fishermen inform us that at times they take considerable numbers in their nets. The only places where the loon seems to breed in the adjoining country is on the little isolated lakes of the interior, such as those of Oakland county, Michigan, where but a pair or so still manage to perform the duties of nidification.

4. * *Larus argentatus*.—Herring Gull.

We have found the Herring Gull a common species during all our visits, even as late as May 22 (1906), and as early as September 1 (1905-06). At times of high wind they frequent the surf at the end of the Point. At other times they can generally be found on the stakes of the pound nets that stretch for some distance out into the lake on both sides of the Point. September 13, 1905, we were presented by some fishermen with a very wet and bedraggled Sharp-shinned Hawk (*Accipiter velox*) that they had picked up out of the lake where it had been buffeted by the Herring Gulls, and would certainly have been drowned if it had not been rescued for another fate. It seems almost incredible that a bird as large as this gull should have any cause to fear this small *Accipiter*, but there must be some basis in past experience to form such an antipathy as this case shows. From our experience at the western end of Lake Erie and the Detroit River we regard the species as common throughout the winter as long as there is open water.

5. *Larus philadelphia*.—Bonaparte's Gull.

Without doubt a common and regular migrant. We have noted it on all spring visits as late as June 1, 1907. We have not seen it in September, but found it present October 14, 1906, and October 29, 1905. A few immatures may remain during the summer.

6. *Sterna caspia*.—Caspian Tern.

Noted by Saunders on the east shore late in August, 1882. We saw four flying up and down the same shore May 13, 1905, in company with Common Tern; and September 8, 1905, Mr. Swales saw two adults flying just out of gun range near the end of the Point. (Auk. XXIV, 1907, p. 137.)

7. * *Sterna hirundo*,—Common Tern.

An abundant migrant and observed commonly on nearly all visits and as late as September 20, 1906, though none have been seen in October. Breeds in great numbers on the Hen and Chicken Islands directly south in Lake Erie.

8. **Hydrochelidon nigra surinamensis*.—Black Tern.

A common summer resident and breeder. Sets of eggs were taken by Saunders in 1884 and they were evidently nesting or preparing to do so May 31, 1907. September 12, 1905, is our latest fall date when we witnessed an interesting migration of the species. Early in the morning a large number were observed passing southward along the east beach. Many paused on their way, alighting on the net stakes about half a mile out in the lake until every stake was covered. Nearly all were immatures. By noon all had passed.

9. ** Phalacrocorax dilophus*.—Double-crested Cormorant.

March 10, 1907, we discovered the remains of a specimen of this species on the eastern shore that we were informed had been killed the previous fall. The head was preserved for record.

10. *Merganser americanus*.—American Merganser.

Undoubtedly both Mergansers occur regularly on the waters adjacent to the Point, though we have not noted them personally. This is the species the gunners seem the better acquainted with and they report it as common during migrations and through mild winters.

11. ** Lophodytes cucullatus*.—Hooded Merganser.

Reported by the gunners as a common migrant. A fine male sent us taken November 13, 1906.

12. ** Anas boschas*.—Mallard.

Without doubt a common migrant and a common though limited breeder, as reported by the gunners. Birds seen and taken September 1, 1906, were likely raised on the marsh. Locally all females are known as Grey Ducks by the gunners, who regard them as of a different species. This confusion is likely caused by the taking of males in the "eclipse" plumage when for a short time during the summer moult it assumes the general plumage of the female.

13. ** Anas obscura*.—Black Duck.

A. obscura is a more abundant species than *boschas* and is reported by the gunners as a common breeder. Saunders saw a pair waddling about the marshes June 3, 1884, and May 30, 1907, he and Taverner noted ducks in singles and flocks over the marshes to the number of twenty or more that we took to be of this species. In all probability late migrants will be found to be the form *rubripes*, though so far we have been unable to examine specimens from there later than October 15 (1906).

14. *Chaulelasmus streperus*.—Gadwall.

Gardner seems to know this duck, though he says it is not common. Though it likely occurs rarely, until specimens are secured its status must remain hypothetical.

15. ** Nettion carolinensis*.—Green-winged Teal.

Undoubtedly small numbers are of regular occurrence during mi-

grations. We secured a pair taken October 25, 1906. This species has diminished in numbers of late years throughout this section.

16. *Querquedula discors*.—Blue-winged Teal.

A common migrant, coming early in fall and remaining late in spring. A few may remain to breed as the residents report. Noted a couple in the dyke ditch May 21, 1906, and May 31, 1907. Gardner reported that a few were seen a day or so before on the marsh. Common from September 1 to October 15, 1906, when we left. This species does not seem to be diminishing at this end of Lake Erie as reported by Fleming for Lake Ontario. (Auk XXIII, 1906, p. 444.)

17. *Mareca americana*.—Baldpate.

Reported a fairly common bird during migrations.

18. * *Dafila acuta*.—Pintail.

A regular and fairly common migrant. Have seen it between the dates of September 13, 1906, and November 7, 1906.

19. * *Aix sponsa*.—Wood Duck.

This rapidly disappearing species seems to be still far from uncommon on the Point. We saw numbers both dead and alive all through September 1905-1906, and Gardner reports taking one November 1 of the latter year. He also captured a winged bird on the marsh December 17. According to the shooters they breed in considerable numbers, though they are most common in spring. This spring (1907) Gardner reports a falling off in numbers. He is perfectly familiar with their breeding habits, and when we asked him as to how the female got her young to the ground from the nest he said that he had several times seen her take the young out of the nest in her bill and deposit them one by one at the bottom of the tree where they crouched motionless while she returned for the next. When all are down, with the old one in the lead, they make straight for the nearest water. He says that the greatest enemies that the young birds have after they leave the nest are the Snapping-turtles and large Pike that infest the marshes.

20. * *Aythya americana*.—Redhead.

A very common migrant on the ponds, where it feeds on the mass of Wild Celery (*Vallisneria spiralis*) growing there. Saunders observed them as late as May 31, 1884. In 1906, the first seen by Gardner was October 9, though the year before we took one on the Lake Pond September 9, but as it was an injured bird the date is of no migrational importance. October 15, 1906, we saw large rafts of them in the center of the Lake Pond and the last were reported from the Point December 1.

21. * *Aythya vallisneria*.—Canvas-back.

Not as common as *A. americana*, but of regular occurrence. Gardner reported a number October 13, 1906, and November 16 sent us a specimen.

22. **Aythya marila*,—Scaup Duck.

A common migrant. Reported by Gardner August 31, 1906. We saw a number September 1. Received several specimens from the Point in November the same year. Reported common December 1. We saw them as late as May 13, 1905, and heard of the presence of "Bluebills" May 29, 1907. This species is locally known as "Lake Bluebills" by the shooters.

23. **Aythya affinis*,—Lesser Scaup Duck.

A common migrant, locally called "Marsh Bluebill." We had specimens sent us November 7, 1906, and it was reported December 1. A few remain all summer, but they are likely cripples or unmated birds.

24. **Aythya collaris*,—Ring-necked Duck.

Gardner states that this duck occurs in limited numbers especially in spring. He sent us a male taken November 16, 1906. (Auk. XXIV, 1907, p. 139.)

25. *Clangula clangula americana*,—American Golden-eye.

Reported to be a common migrant. We saw a male bird May 13, 1905, and it was reported by Gardner September 13, 1906.

26. **Charitonetta albeola*,—Buffle-head.

A common migrant. We saw none during our October visits, but had a number sent us November 7 and 16, 1906. Gardner reported about twenty December 1 the same year.

27. *Harelda hyemalis*,—Old Squaw.

A bed of about fifty lay out in the lake near the nest stakes May 13, 1905. Mr. Grubb said that they had been there for several weeks. A number remain during open winters. Locally termed "Coween," "South-southerlies" and "Sou-easterlies."

28. **Erismatura jamaicensis*,—Ruddy Duck.

Observed on the ponds by Saunders June 10, 1884. We secured a crippled bird on the Lake Pond September 12, 1905, but regarded it as a "left-over" from the previous migration. Gardner reported a number October 13, 1906, and about fifty December 1. He sent us a female November 7.

29. **Chen hyperborea*,—Lesser Snow Goose.

An immature bird was shot near the base of the Point October 17, 1905, by Sidney Stanlick, of Leamington, and secured by Taverner. It was very poor and an injured foot bespoke a recent injury. (See Auk, XXIII, 1906, p. 219.)

Gardner reports that in November, 1906, after the marsh had frozen over there were eight white geese seen in the fields at the base of the Point, but they were harried so at long range that they became so wild that no one succeeded in taking any of them. They doubtless belonged to this species.

30. * *Branta canadensis.*—Canada Goose.

A common migrant, perhaps more abundant in spring. They sometimes frequent the ponds, but are usually found feeding on the cultivated fields inside the dyke at the base of the Point. Observed October 28, 1905, and October 11 and 12, 1906.

31. * *Olor columbianus.*—Whistling Swan.

Gardner reports Swans as occurring irregularly in spring. Usually they remain well out in the lake, but sometimes during heavy weather they venture in on the ponds. It is less common in fall. We have seen mounted specimens of this species in Leamington and as *columbianus* is the common form in this section, list it under this head, though *buccinator* may occur.

SPRING MIGRATION ANOMALIES IN 1907

AS OBSERVED BY O. WIDMANN AT ST. LOUIS, MO.

The abnormal weather of the spring of 1907 caused unprecedented deviations of migration dates from the standard set up during thirty years of observation. A series of ten hot summer days in the latter part of March pushed vegetation to a state of development never seen before at that time, opening the buds of leaves and flowers not opened in other years before the latter part of April. Just as these tender growths were exposed, and before they had time to strengthen, a freeze followed in early April, killing them. All through April the temperature remained so low that almost no advance at all was made in plant growth, and this perfect, most remarkable, standstill lasted till early May and even then progress was exceedingly slow. Hickories did not leaf before the second week of May and Sycamores, whose first leaves have been killed, were still without leaves at the end of May and are even now (June 6) very thinly clothed.

That this retardation of plant growth had more to do with the delay of migration than the low temperature itself seems probable. Insectivorous birds seem to be influenced more by the condition of vegetation than the weather, especially those which find their principal food in the small larvæ infesting

the leaves of trees. Vireos, Warblers, Orioles and others experienced the greatest delay, while Thrushes and other ground feeders were less irregular.

Spring migration started as usual. Juncos, for instance, appeared in force on March 15th and reached maximum on the 20th. Most of them had passed on, but flocks continued to arrive when the change in the weather came at the end of the month and, while in most years Juncos are rarities after the middle of April, this year they were present in force until the 20th and stragglers until May 4th.

Fox Sparrows came as usual March 15th and were unusually numerous March 20th to 25th, but the hot weather took them all off at once and none were seen after the 25th, while in other years their transit is extended into April, sometimes to the third week of it.

White-throats kept their normal dates pretty well. The van appeared as usual at the middle of March (16th) and the hot period did not affect them visibly; but the bulk, the great army, due April 20th, came a week behind time, April 28th, and remained with us a week later than in other years, to May 12th; the last ones were seen May 17th, the middle of May being the usual time for them.

White-crowns, too, did not deviate much from the rule, appearing in numbers May 3rd, but contrasting with their usual soldier-like precision, when nearly the entire army passes within a few days and all are gone after the 15th; this year's passage was dragging with the 22nd for last day, breaking the record of the state by four days.

The middle of March marks the invasion of this region by north-bound Song Sparrows and the bulk was here promptly on the 17th, but induced to rapid transit by the heated term the species ordinarily three weeks in passing had disappeared after the 25th and none were seen between March 25th and May 12th, when from that day until May 30th Song Sparrows were seen and heard to sing in three places not known to be breeding stands. Whether these individuals were belated transients or summer residents spreading to entirely new territory remains to be seen.

Contrary to the rule that Yellow-rumps appear in large numbers early in April none were in evidence before April 20th, when they began to appear in pairs. Few were noticed until May 3rd, at which time in other years the species becomes rare, but this year the bulk arrived. Transit of it dragged through two weeks and the last of the species were seen May 27, three days later than the latest on record, May 18th, '86. Another prominent transient visitant, the Sapsucker, appeared as usual March 23rd, but before the bulk had reached us the change in the weather occurred and all farther progress was stopped until the middle of April, when movements were in order and the great host of transient Sapsuckers crossed this latitude, being most plentiful April 20th and last noticed April 24th, which is not particularly late, as many instances are on record when they remained to the end of April, even into May.

Conspicuous in transit, because traveling in broad daylight, is the Blue Jay. Old pairs often, though not always, permanent residents were seen building nests on March 25th, the usual time, but north-bound transients began to pass April 27th, from one to two weeks later than in former years. Flocks continued to come and go until May 10th, the regular time when these migrations of Blue Jays cease. Birds of last year were seen mating May 12th and building May 16th, nearly two months after their parents had gone through the same experience.

The most noticeable disorder showed itself in the passage of northern Warblers and in the arrival of our summer residents due in April. Most of those coming ordinarily soon after the middle of April came only in the last days of the month or in early May. Red-headed Woodpeckers, Baltimores, Catbirds, Rose-breasts, Wood Thrushes, Summer Tanagers, Redstarts, Parula Warblers, Warbling Vireos, Ovenbirds and Swifts came on the 28th and 29th. Yellow-throats, Yellow Warblers, Orchard Orioles on May 2nd; Great Crested Flycatchers, Chats, Kingbirds on the 3rd; Indigo Buntings on the 4th; Pewees and Scarlet Tanagers on the 9th and Bell's Vireo on the 10th, all from one to two weeks too late.

Some did not get their full numbers before June, a month later than usually, noticeable among them the Red-eyed Vireo and Orchard Oriole. Kingbirds seem rarer than in other years; also Hummingbirds, though there are plenty of blooming plants, some early plants retaining their flowers much longer than in other springs, for instance, Spring-beauties, Violets and Phlox, also Fire-bush and Snowball, open flowers of which are still to be seen.

Swainson's and Alice's Thrushes came in their usual abundance and kept nearly their regular time, remaining only a few days longer, to June 4th. Hermit Thrushes came early and staid late, from March 23rd to May 1st. Wilson's Thrushes came late and were here only six days, from May 14th to 19th, inclusive.

Never did we have such an opportunity to admire the beauty of northern Warblers as this year. Not only did they remain long and in larger numbers than ever, but they were remarkably tame and frequented the lower branches of trees and shrubs, where they could be seen easily on account of the thin cover which trees and shrubs afforded throughout the month of May.

The most numerous of all Warblers was the Black-poll. The first came May 3rd and the last is not gone yet, two females being seen this morning (June 6th). From May 16th to June 3rd whole flocks of males and females were met with wherever we went, but unlike other years, their song was seldom heard.

The Chestnut-sided Warbler was first seen May 9th and daily in numbers, males and females together, from 16th to 22nd, and only slightly less abundantly to June 3rd.

The Magnolia Warbler came May 12th in little troops, both sexes, and remained plentiful to May 22nd, but smaller numbers were daily seen till June 3rd.

It might be stated that most of the Warblers came about a week later and remained from one to two weeks longer than in most other years.

Northern Waterthrushes were common most of the time

from May 9th to 28th. Transient Redstarts from May 12th to June 3rd.

Baybreasted Warblers from May 16th to June 2nd, both sexes.

Cape May Warbler from May 16th to 28th, mostly males.

Blackburnian Warbler from May 14th to 22nd.

Mourning Warbler from May 18th to June 3rd; the singing male accompanied by female.

Black-throated Green were strangely scarce; only on four days, May 14th, 16th, 17th and 22nd.

But most striking was the scarcity of Tennessee and Nashville Warblers, in other years some of the most abundant transients. Never did we have such small numbers of them nor did we have so little of their song. The transit of the Tennessee was extended over twenty-five days, but on no day were there more seen than eight (May 22nd). They came two weeks later than usual (May 9th) and the lasts were still present June 3rd. The Nashville Warbler was noted from May 1st to 22nd, but only two birds at any one day.

On the other hand Wilsonia pusilla and canadensis exceeded all records for abundance and length of stay. Pusilla came May 11th and Canadensis May 13th, but from the 14th to 22nd they were in troops along creeks and scattered everywhere, both males and females together, the males full of song. Wilson's was gone after the 24th, but the Canada Warbler remained till June 3rd.

Another species which had an unusually prolonged stay with us is the Least Flycatcher from April 29th to June 3rd. The Yellow-bellied from May 16th to June 4th, and the Olive-sided from May 28th to June 4th, but representatives of the Flycatcher family may still be lingering with us, the thirteen-year locusts having made their appearance during the three days' rain from May 30th to June 2nd, and afford an abundance of food for all birds.

My report would be incomplete would I omit the mention of unprecedented numbers of Pine Finches present from May 15th to 23rd. Wherever we went on these days we met troops of thirty or more in company of Goldfinches or at least fre-

quenting the same places, coming down with them to drink and bathe and trying to make their feeble song heard when the Goldfinches made pauses. Goldfinches, also, came ten days later than in other years. The bulk of males was first noticed May 1st and the height of migration occurred May 13th to 19th, when flocks of a hundred or more, both sexes, were at their old stands. Smaller numbers, mostly females, were left at these places until the 23rd, after which summer residents only were seen.

Purple Finches, usually present in troops from March 10th to April 20th made a change this year by coming only on April 20th and staying in flocks till May 1st and in smaller numbers, brown birds, till May 19th.

As a counterpart of the unexplained reappearance of the Song Sparrows in May must be mentioned the still more remarkable presence of a Brown Creeper in song May 19th in a remnant of native timber within the city limits of St. Louis. None had been seen since April 20th.

NOTES ON THE BROAD-WINGED HAWK.

(Buteo platypterus.)

BY R. W. SHUFELDT, F. A. O. U.

Upon looking over, the other day, some old unpublished ornithological notes and negatives of mine I came across some that referred to the Broad-winged Hawk, and as the account includes the keeping in captivity three subadult specimens of this species, taken by myself, I thought perhaps that the material might be worthy of preservation.

The pair had nested within about a mile of my then residence at Takoma Park, Maryland, and both my son and myself were acquainted with the fact, having often noticed the birds circling overhead in the vicinity. They had selected a tall, ill-shapen oak with short, crooked limbs, and the nest was

in a crotch of it near the top, some fifty feet from the ground. This tree stood in a rather open piece of woods of some extent, and grew near the hilly bank of a small stream. During the latter part of June, 1897, my son had climbed to the nest and inspected the eggs, of which there were four, with nothing peculiar about them, except that he reported that the dark markings on them were rather strong and pronounced.

For some reason or other this nest was not visited again by us, and it appears that the clutch was duly hatched out. One morning toward the middle of the following month a negro brought to my house three young Broad-wings, which he said he had taken from a tall oak tree about a mile away, and that there were in it four of them, but one had escaped him and flown off. Upon questioning him there was no doubt but that the specimens had come from the nest we had discovered, as he knew the locality well. One of these birds was considerably larger than the other two, and all were able to fly a short distance at a time, but their recapture was not a matter of much difficulty. All of them, when received, were ravenously hungry, but this was soon appeased by feeding them with a generous supply of raw beef cut into small bits. They were very noisy, and resented being handled very much, though among themselves good nature prevailed.

On the 16th of July (1897) I made, late one evening, a photograph of the largest individual of the three, but the resulting negative was not quite as good as I should have liked, owing to the insufficiency of light (see figure). However, the print from it proved to be an interesting picture of the species, taken at an age not usually seen in illustrations, and for this fact I hope it may prove more or less instructive.

In a few days after the above date these birds all escaped, and I was not altogether sorry to part with them, as at that time I had a good many different kinds of living animals about my premises, with my hands correspondingly full in making photographs of them all,—everything from a tree-toad to a Turkey Vulture.

As to the nest that these birds constructed, provided it was

of their building. I was not quite certain in my own mind that they had not taken an old deserted crow's nest and repaired it a little to their liking. Crows were in the habit of building

in that piece of woods every spring in those days, and it is quite possible that these hawks had chosen one of their

abandoned structures. Bendire says in his "Life Histories of North American Birds" that, "occasionally they make use of an old crow's nest, or one abandoned by some other hawk" (p. 244). This one, as is usually the case, was rather a bulky affair, somewhat loosely put together, and composed of oak twigs, and lined with strips of pine bark, but then there were some other unlooked-for materials sparingly mixed up in it, not used, as a rule, by this hawk, that more closely resembled a crow's work of the year previous. The hawks may have pulled out the old lining, however, and made other additions to suit themselves.

OUR BIRD-BATH.

BY CARRIE FLAGLER SCHANTZ.

In June last year (1906) we laid cement walks, and from the "remainders" Mr. S—— built a bird-bath in the corner of our yard.

He marked out a circle about three feet in diameter. He then excavated to a depth of twenty inches, and filled the space within eight inches of the top with cinders, packing the cinders well; on top of the cinders he put a mixture of gravel and cement and then finished with a mixture of sand and cement, making the center of the bath about six inches below the sod and sloping from the center to the rim of the bath, which was left a little lower than the sod. The bath is located within four feet of a high wire fence in the northeast corner of the yard. It was finished too late for the spring migration, but how the birds enjoyed it through the rest of the summer and until it froze over in the fall! We fill the bath with water from the garden hose and sweep it out with a broom to keep it fresh and clean.

You would be surprised at the number of times it needed cleaning and re-filling on certain warm days. We are in a

suburb of Chicago, and street cars and steam cars are all around us (within from one to six blocks), still we see many varieties of birds every season.

The varieties seen at or near the bath were: Robin, English Sparrow, Bluebird, Gray-checked, Olive-backed, Hermit, and Wilson's Thrushes, Fox, Tree, Chipping, White-throat, White-crowned and Song Sparrows, American Goldfinch, Pine Finch, Red-winged Blackbird, Catbird, Junco, Yellow Warbler, Flicker, Meadowlark, Towhee, Winter Wren, Blue-headed Vireo, etc.

One of the most interesting sights was late in September. A flock of Pine Siskins surrounded the bath, just as thick around the edge as they could crowd, flying up and down and in and out, affording us who watched from the windows of the house a delightful hour.

The bath has given us many a close glimpse of our enjoyable little visitors and has more than repaid us for the trouble of building it.

The top of the fence affords a good place for the making of a toilet after the bath. Some shrubbery has been planted in the corner and in time will add to its beauty and usefulness, but you may be sure that nothing has been planted that will hide our view of the bath from the house.

The Pine Siskins came twice each day as long as they were in the neighborhood, for a drink.

We planted sunflowers outside the fence and the Goldfinches and Pine Siskins found much to their liking with food and water both so close together.

We have also proved that birds get "real dirty." Many times after several birds had been in the bath the water would need renewing on account of the dirt left by them.

It is also surprising how so many birds located the place to drink, for we noticed not only many new visitors, but many that came regularly day after day.

ON RUBYTHROATS.

BY CHRESWELL J. HUNT.

How often does one get even half a look at a Hummingbird? We see them hover for a moment about some clump of flowers and then like a flash they have vanished—we know not where. Of so diminutive a size and with such marvelous swiftness of wing, is it not a veritable will-o'-the-wisp?

If we are so fortunate as to find one of the tiny nests we may watch the female caring for the family, for from what has been written it would seem that the female is left to shoulder all the domestic cares alone. But after the young are awing and when away from the nest how and where does the Hummer spend the time?

In my field experience how seldom has it been my good fortune to have one of these birds under observation for even ten minutes at a time! Well I remember, when a youthful egg collector, how I was informed by the wise ones that the only way to discover a Hummingbird's nest was to hear the hum made by the wings of the incubating bird. Of course this story should have been relegated to the rubbish heap along with that of straddling Flamingoes, etc., but being of a credulous age with much faith in what the elders told me, I was led to believe that a hummer's wings were always in motion and it was not until some years afterward when I visited a museum and saw a hummer mounted upon a nest with the wings at rest that I realized the error, for otherwise would not the taxidermist have spread them? But of the Hummer at large, what of him? How much of his time does he spend in feeding? For how long does he rest, perched upon some twig? Where does he spend the night? Also do not some flowers attract him more than others or more properly does he not find some flowers more profitable feeding-grounds than others? The trumpet vine is said to be a favorite, but what of the others ? These are a few of the questions that I have frequently asked myself and upon which I have tried to throw some light, but my efforts in this direction have been well-nigh fruitless. Whenever we do

chance to meet it is nearly always a case of "now you see me; now you don't"—and Hummers leave no trail.

In going over my note-books I can find but four instances where I have had this bird under anything like satisfactory observation and then what they taught me was indeed next to nothing.

I offer these scanty notes, not that they contain any real value but in hopes that they may call forth the experiences of some other student who has been more fortunate in the study of Rubythroat ways.

It was a hot August day and I was trudging along the dusty road when a Rubythroat darted across in front of me and hovered above a clump of blossoming Jewel weed (*Impatiens fulva*). I am inclined to believe that among the wild varieties this plant is a favorite with the hummer, for I have frequently noted them about it. I watched this bird for fifteen minutes or more and then it left for parts unknown. It was a female or young of the year. It would go from flower to flower for several minutes and then would perch upon a branch of the Jewel weed where it would stretch out a wing and run its bill down over and under it, seemingly smoothing out the feathers.

Again I was following a wood path one June day when I was surprised to see two Hummers hovering above the path directly in front of me. I halted and they darted all about me, sometimes almost into my face. It may be that they had a nest close by, but if so I was unable to locate its whereabouts. But why would both birds be guarding the nest? Is it not left entirely to the female?

One disagreeable October day—the fifth of the month—with a cold driving rain I had taken up my station in the woods beside a dogwood tree to watch the birds that came to feed upon the crimson berries. These all proved to be Robins and I had about decided to move on when a Crested Flycatcher alighted in the tree and began to feast upon the plentiful fruit. Whether the berries were not to his liking or his appetite easily satisfied I know not, but after eating a few he darted up into a chestnut tree that stood near by. My

eyes followed him but not far, however, for they rested upon a little knob at the end of a twig away up in that chestnut tree. I shall never be able to say why this tiny knob should have attracted my attention, for it was not until I had brought my field glasses to bear upon it that I realized I was looking at a Rubythroat. He certainly did look like a drowned rat. Every feather seemed saturated with the cold rain and there he sat and preened away at them with his bill. While I watched him he flew to another perch and finally left me, but I wondered where he sought his food at this season. Among the goldenrods and asters, or did he catch insects from some perch in true flycatcher fashion?

We were boating on the Delaware River in late July. I had pushed the boat's bow in among the marsh grasses and sat waiting for my friend who had gone ashore. Down darted a Rubythroat and hovered before a Cardinal flower sat less than four feet away he was not the least bit alarmed. He visited every flower, one after another, then made a circle in the air only to return and revisit each flower. My friend appearing about this time, Mr. Rubythroat made a rapid departure.

Still another picture stands out vividly on by memory. It was the third of July, 1904. Tom and I were climbing the Welsh Mountains in N. W. Chester County. We came to a little clearing. We scrambled over the low stone wall into a small meadow, where we waded knee deep among timothy and clover. There going from one red clover head to another was a Rubythroat. His red throat seemed fairly aflame in the sunlight. We saw him for only a brief moment, but somehow the picture clings. We had a good trip that day, with lots of novelties. There had been Scarlet Tanagers, Chestnut-(*Lobelia Cardinalis*) standing by the boat's bow. Although I sided Warblers and Rough-winged Swallows; Bartramian Sandpipers had shown us how gracefully they could fold their wings, and a Nighthawk, resting in the road, had almost let us trample him under foot, but whenever I recall the Welsh Mountain trip I see again that hillside meadow, the crumbling stone wall, the nodding clovers and the Rubythroat.

WALTER J. HOXIE.

BY FRANK L. BURNS.

The accompanying photos were taken near Port Royal, S. C., May 10, 1901, "a red letter day" Walter J. Hoxie called it. Mr. Hoxie has written that he had not given up ornithology

Young Black Vultures (*Catharista atrata*). By W. J. Hoxie.

but ornithology had given him up when it became a question of bread and butter. As a taxidermist, he failed to settle down in any place; in fact, could not get altogether suited as to locality. I do not know whether he is living at this date. He "began just before the '60's," and kept up a pretty steady correspondence with Prof. Baird and Dr. Coues. A Yankee

schoolmaster, locating near Frogmore, S. C., in the palmy days of the "O. and O.," he wrote many entertaining and instructive papers, seeming to see the joke in everything possible. In July, '88, the U. S. Department of Agriculture employed him to collect in Florida at $75 per month and expenses to Titusville. He was to look up certain species and

Young Black Vultures (*Catharista atrata*) Asleep in their Nest.
By W. J. Hoxie.

visit certain localities at his own expense from there. At once he met difficulties: predatory mammals, birds and insects made away with nearly all trapped specimens, sometimes trap and all; skins were devastated by small ants and gigantic cockroaches; expenses exceeded salary; so reducing his baggage to a minimum, he departed for Cape Canaveral with 100

rounds of ammunition, of which he scarcely wasted a shot; and lived on "shot meat" to recuperate his finances. Yellow fever breaking out, Jacksonville and counties in Florida quarantined against one another; so it was some time before he could make his way into the interior and take the desired specimens of the Florida Burrowing Owl and Little Striped Skunk (his description of the breeding habits of the former is quoted by Bendire in his *Life Histories*), and we hear of him wading the swamps north of Okeechobee bare-legged, in company with a Seminole, and shooting the Carolina Paroquet; it was here, too, he received the thirty days' notice from the Department, as he had not averaged the required twenty specimens a day. Since that time he has visited Florida twice and had "no end of a good time," but added nothing to the literature of the country. During our latest financial depression, he writes in '95: "Never saw such hard times. I am tired of looking for the 'silver lining to the cloud.' Nickels or even coppers would be awfully dazzling to my sight." 1901 finds him leading the lonely and rather hard life of a shipkeeper on board the Accomac, Port Royal naval station; and it was here while lying on his back in a bunk during his "four hours off," the touching little narrative of the "Rough-wings of the Tucules" was written—the first article to appear in the *Wilson Bulletin* after the present writer took it up for the year 1901—that volume so prolific in typographical errors, vexatious delays and unfruitful toil on the part of the editor and publisher. Walter Hoxie was an honest observer. He could write and he could shoot; he appears to have valued information above specimens. Perhaps he possessed too much sentiment in his make-up to be a successful collector. Who knows?

THE WILSON BULLETIN

A Quarterly Magazine Devoted to the Study of Living Birds.
Official Organ of the Wilson Ornithological Club.

Edited by LYNDS JONES.

PUBLISHED BY THE CLUB, AT OBERLIN, OHIO.

Price in the United States, Canada and Mexico, 50 cents a year, 15 cents a number, postpaid. Price in all countries in the International Postal Union, 65 cents a year, 20 cents a number. Subscriptions may be sent to Lynds Jones, Oberlin, Ohio, or to Mr. Frank L. Burns, Berwyn, Penn.

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EDITORIAL.

As announced by postal, this issue of the BULLETIN is a month late because the Editor spent the month of June on the Washington coast with Rev. W. L. Dawson, studying the birds of that little known part of our Pacific coast. Some of the results of that study may be expected in subsequent BULLETINS. It is sufficient here to remark that the value of the month's experiences cannot be measured in current values.

Notices of publications received and book reviews must again be deferred because the time at the editor's disposal will not permit the proper attention to such reviews. He wishes to express his thanks to authors and publishers for courtesies thus received, with the promise of careful review at the earliest possible date.

As announced on the cards sent out in June, the September number of the BULLETIN will also be somewhat late because of the expected absence of the Editor in Porto Rico during the better part of August. But the lateness of that issue will be largely determined by the con-

tributors to that number. If copy can be made ready for the printers before the departure of the Editor everything can be in readiness for the final make-up immediately upon his return.

Members of The Wilson Ornithological Club will please take notice that the address of our Treasurer, to whom all membership dues should be sent, has been changed to Grosse Isle, Mich. Members will also please report promptly to both the Secretary, Benj. T. Gault, Glen Elly, Ill., and to the Editor, any change in their address. Many copies of the BULLETIN are lost because changes in address are not promptly reported.

The Executive Council of The Wilson Ornithological Club have decided upon and are now acting upon a plan whereby candidates for membership must apply for membership to the Secretary, who will see that they are properly brought before the active members at the annual election of members. Hereafter the names of the officers will be printed at the head of the editorial page so that names and addresses may be generally known.

It is expected that with the beginning of the volume for 1908 the WILSON BULLETIN will be enlarged to 48 pages for each number, more illustrations introduced, the general tone of the matter printed in it of a higher quality, and the price advanced to one dollar a year to persons not members of The Wilson Ornithological Club. Advance subscriptions for 1908, which have already been received, and subscriptions at the fifty cent rate for the year 1908, which are received before December, 1907, will be honored for the 1908 volume only. Membership dues will not be changed, and although Associate members pay only fifty cents a year they will receive the BULLETIN without further charge. The Editor has many times been asked by many persons how the BULLETIN could be made to pay for itself at that subscription price. The secret is that it has never paid. It has been maintained at a loss for the good of the cause, and he feels certain that it has been a paying investment, however inconvenient at times. The enlargement and advance in price are made at the demands of readers of its pages and therefore clearly represents growth in appreciation of the value of bird study. Do you approve of the plan? Write.

FIELD NOTES.

Dickcissel (*Spiza americana*), in Wayne county, Mich.—In the WILSON BULLETIN, Vol. XII, No. 2, p. 66, and Vol. XIV, No. 1, p. 33,

I recorded my experience with Dickcissel in Wayne county. I have recently corresponded with Mr. James B. Purdy, of Plymouth, and quote that portion of his letter relating to this species which, I believe, completes our knowledge of the bird in the county. Mr. Purdy says: "They made their first appearance here in May, 1891; at least this is the first time I saw them. The three pairs were located in a clover field on the east side of the P. M. R. R. track, where the Plymouth railroad yards now stand. I watched them, located their nests, and collected two sets of eggs—one of four and the other of five fresh eggs—on June 1, 1891. The nests were situated about midway between the ground and clover tops and were hidden from view. Since then I have seen them some years and some years they have diminished rather than increased in numbers." J. CLAIRE WOOD.

ANOTHER PROVIDENT MELANERPES ERYTHROCEPHALUS.—The Red-headed Woodpecker is not an uncommon summer resident in this locality, but does not remain in winter. That he should spend the greater part of a May day laying by a stock of provisions is unusual. On the morning of May 22, 1907, a neighbor, planning to be from home all day, gave her chickens a liberal supply of food. About ten o'clock an observer saw one of these woodpeckers fly several times to the ground among the chickens, then he flew to a fence-post, carrying something in his bill. An examination of the post revealed the nature of his hoard. Inside the loosened bark he had placed bits of bread, corn-meal mush, and kernels of corn. Other onlookers saw the bird many times during the day carry away the chickens' food, and hide it in various places. ALTHEA R. SHERMAN.

Redpoll (*Acanthis linaria*) in Ecorse township, Wayne county, Mich.—An event of the season 1906 was the appearance of this bird in Ecorse township and vicinity, in territory which I have hunted over during the last sixteen years without seeing a single representative of the species. The first seen were a flock of four, October 31, and from that time small flocks of from four to eight were seen on all trips until I ceased to visit the locality in late November. I was in another portion of the township January 11, 1907, and saw a flock of about thirty. They were in a small field of weeds beside a school house in the village of Ford.

The Purple Finch was also unusually common, first appearing September 9, and last seen October 16. J. CLAIRE WOOD.

SOME NOTES ON THE BALD EAGLE IN WINTER NEAR NEW YORK CITY.—In severe winters like the past one the Bald Eagle is a common bird in the Hudson River Valley near New York City. They come down the river upon large ice-floes, and when they reach the north-

ern limit of ferry traffic they fly up-stream again. If there is no ice in the river no eagles are likely to be seen. Ebb tide is also necessary to bring them down. Occasionally they perch upon the cliffs of the Palisades on the New Jersey shore of the river. They have also been reported as flying over the city.

It is interesting to notice the actions of the Herring Gulls, abundant in the river all winter, in the presence of Eagles. They do not mind young Eagles at all, but if an adult bird comes close they scatter to all points of the compass. Probably only old birds attack and rob them, the young not being courageous enough for that. Immature birds predominated this past winter. Of the six or seven seen by the writer on two trips along the Palisades, only one was an adult. February is the month in which they occur in the largest numbers. GEORGE E. HIX.

NOTES FROM BERWYN, PA.

Seiurus motacilla.—Louisiana Water Thrush. On May 6, 1906, I observed a pair one mile from Berwyn in a rather extensive and well-watered tract of woods, and they gave evidence of a present or future nest. With metallic "chucks," wagging tails and quick dashes back and forth over the creek, they kept me busy catching a focus.

Chætura pelagica.—Chimney Swift. On the evening of the 1st of June I took one of these birds out of my office stove, where it had been for several hours, arriving via the short brick chimney and stove-pipe, which has two elbows. I had heard it fluttering in some part of the pipe during the morning and rescued it about 7:30 p. m. After it had been liberated, it returned within ten minutes and was down to the grate by the next morning. It was again heard fluttering in the chimney on the evening of the 3d, but I was so busy that the matter did not reoccur to me until the next evening, when I found it in the grate, exhausted and one eye glued tight shut with soot. I washed it open with lukewarm water and once more tossed it up in the open air; it flew a few yards, but I am afraid it came to the ground beyond the hedge; at any rate I saw it no more. It doubtless had been seeking a place to nest.

Helodromas solitarius.—Solitary Sandpiper. A boy showed me a female of this species which he had shot August 8th. He had aimed his rifle at the body of the bird, while it was feeding in the shallow creek, and it had raised its head in time to catch the over-shot bullet in the neck, almost beheading it. The date is very early for this locality. FRANK L. BURNS.

RING-BILLED GULL.

The Ring-billed Gull has recently been the subject of remark by several observers in Ohio and Michigan. These remarks have taken

the form of the establishing of records of the occurrences of the species along the Detroit River and Lake Erie shore. This bird is one of my puzzles. Unless near enough to see the bill I have never been able to identify it, but the purpose of this note is to call attention to the fact that in June of 1905 I was on an island about fifty miles south of Manitoulin and near the head of the Bruce Peninsula, where this bird breeds in quite large numbers. The nests were not counted, but there must have been at least one hundred. We collected eight or ten sets of eggs and their absence was scarcely noticeable among the occupied nests. In 1906 I visited other islands in Lake Huron about fifty miles southwest of the above location, forming part of a chain, extending from the upper end of the peninsula to its base. One island was occupied entirely by the Common Tern, another by the Ring-billed Gull, and the third by the Herring Gull. In view of these two known localities in Lake Huron where the birds nest in considerable numbers and the strong probability that it is equally abundant on other islands, one is forced to the conclusion that the reason why this bird is not more frequently recorded is the great difficulty in identification by sight. On both of the occurrences referred to I made the attempt to separate the birds as they sailed around, but failed absolutely. I did succeed in learning that the note of the Ring-billed is pitched in a higher key than that of the Herring Gull and was able to separate them in that manner.

From my experiences in the nesting of this bird on Lake Huron I would judge that it is equally as common as the Herring Gull and that the only reason why records are not made a bit more frequently is that it is so difficult to identify. W. E. SAUNDERS.

THE FIRST BIRDSKIN OF ELLIOT COUES.

THE
WILSON BULLETIN

NO. 60.

A QUARTERLY JOURNAL OF ORNITHOLOGY

VOL. XIX. SEPTEMBER, 1907. NO. 3

THE FIRST BIRDSKIN OF ELLIOTT COUES.

(A BIT OF HISTORY.)

BY DR. R. W. SHUFELDT.

What I am about to relate must have taken place along some time in the early 80's, but as to the exact year, or the month and much less the day of the month, I've quite forgotten. However, to the best of my recollection it was in the summer of 1882, as that year I was on duty in the Surgeon General's office at Washington.

In those days Doctor Coues was in his prime, both in the matter of physical health, as well as in literary activity. He occupied Professor Baird's old desk in a room of the north tower of the Smithsonian Institution, and was principally engaged in driving away at the second edition of the Key to North American Birds, that subsequently appeared in 1884. The room adjoining his was occupied by Doctor Gill and Henry W. Elliott, while the present writer was a privileged daily visitor at the twin sanctums.

Among us four Doctor Gill passed familiarly under the cognomen of "The Pope"; Coues somehow had come to be simply designated as "Couesi"; Elliott none other than the "Pygmy," owing to the comparative humble nature of his

scientific achievements; while I with my few papers on "bird-bones," occupied, by all odds, the most inferior position in these respects, and was made to feel it by bearing the title of the "Pygmiculus."

Those were the times when Robert Ridgway held forth in a room, several flights up, in the south tower—a "den" in which he did a large part of his work, and where he was quite removed from all of those maddening annoyances that inevitably attend an ornithological writer of his reputation, occupying a government position. There were so many persons who were more than eager to have him tell them just how many eggs a chippy-bird laid, or what he used to "stuff birds with," and how much he had to pay for glass-eyes, and was it true that the pelican fed her young with her own blood, and was the Bible right in stating that a bat was a bird, and would all kinds of birds' eggs hatch out in an incubator, and, —and the rest.

For me, during that summer, it was one of the treats of my life to be able to spend half an hour a couple of times a week in that old room of Ridgway's, especially when he was busily engaged painting the picture of some bird or other, as he sat at the quaint old desk over by the window. I remember how I used to marvel at the rapidity of his work, and his superb appreciation of the value of pigments and color.

Early one afternoon, somewhere along in the time I have mentioned, I climbed up the narrow and stony stairway to see him about something I had in mind, and upon coming into the room, to my wonderment I beheld a young pyramid of birdskins piled up on the floor, numbering evidently several hundred, or perhaps a thousand, and representing everything apparently known to the avifauna of this country. In character, the skins much resembled those I used to "put up" in my 'teens, and before the opportunity was afforded me to make an exhibition of my ignorance as to where such a sudden influx of heterogeneous material had come from, Ridgway remarked that "Coues intends to turn in his collection"—in other words that ever-open scientific maw of immense proportions of the Smithsonian Institution was once again about

to receive into its cavity, close down upon, swallow and digest another contribution in the way of a donation, that its life might be prolonged, and strength given it to pass the torch to the ornithological workers of the years to come. Here indeed, ruthlessly heaped up on the floor, was the mass in the main of the bird material of his own gathering, from which Coues had, through the application of his merciless intellectual hydraulic press, squeezed out that great store of ornithological facts, which had furnished the food for hundreds of his papers and books and memoirs, and upon which his name was built. "*Dei et pisciculæ*," as Gill would say, what a classic poem might have been written in the presence of such a theme! But to the great loss to American literature and poetry, be it ever with regret said, the poet was not there, and even had he been, I am not at all sure but what he would have been quite asphyxiated in an atmosphere so charged with ornithological lore, and so rendered unable to command the necessary language to commemorate the incident. Moreover this aerial density was by no means diminished when Coues himself and Henry Elliott came at that moment into the room. For the benefit of those who were familiar with those two strenuous workers as they appeared on such occasions, during the times of which I speak, no pen sketch of mine is necessary, and others, who never knew them, will spare me the attempt of description.

After a moment's banter, which invariably took place when we three got together, and in which Ridgway took no part, Coues,—who had just rolled a cigarette,—with a characteristic wave of his hand, given to direct my attention to his heap of birdskins in the middle of the floor, remarked in words to this effect:

"Well, Shufeldt, what do you think of them?—pretty generous, am I not? going to turn the whole bunch in—reckon I am through with them, and I thought I would give the other fellows a chance to see if they can find any new species among them." This all in a breath, followed by a triple volume of smoke from his mouth and nostrils, that consumed nearly half of his cigarette to produce.

"Very generous, indeed," chimed in Elliott, with one of his broad winks, and a lateral pull of one of his long mustaches.

"Without a parallel in history," said I, "and may the recipient be truly thankful."

"Miraculously so," remarked Elliott, with a jovial grin, "miraculously so, Robert, miraculously so."

"Pick one out for yourself, Shufeldt," said Coues, "as a reminder,—just one, though, just one,—they are still mine, I believe, Ridgway?"

"Thanks in advance, and glad to get the chance," said I. And, passing to the stack, I commenced going over them, leisurely, with the view of making a choice. As I did so Coues and Elliott crossed the room to where Ridgway was, and stood with their backs to me, overlooking his work on the colored figure of the bird he was painting. I had about settled on some medium-sized specimen—an auk, I think—when my eye caught a funny-looking little sparrow-skin, which I casually picked up and examined the label. On the obverse side of this appeared:

"Coues Collection. No. 231. District of Columbia. Spizella Pusilla.—Feb. '58. Elliott Coues."

And on the reverse side:

"I keep this bird because it was the first one of my collection original No. 1."

A little tag attached to the foot bore the number 231. In an instant I recognized the fact that I had in my hand the first birdskin Coues had ever made, but at the same time I felt very sure that he would not care to part with it,—to say nothing as to what Ridgway might say about it. Assuming the best air of indifference I could muster, I stood up, reflecting most emphatically upon the heat of the day as I did so, and my inability to go through the entire collection in the time at my disposal, I said:

"Here, Coues, let me have this little sparrow,—it's only a common field sparrow, but will answer for all that I want, and the matter of room is an item with me." To which in substance he replied:

"Certainly, Shufeldt, any one that strikes your fancy, but it seems to me you might have made a better selection."

"Well," I said, "you are certain you can spare it?"

"Most assuredly," he replied. "It is yours and welcome."

With this Elliott chimed in:

"Well, Pygmiculus, for modesty, a quality I never suspected you of possessing, I am of the opinion that you are it,—d—n it, sir, why didn't you take a California Condor, sir, or a—well, words fail me to express my surprise, sir,—the way in which your modesty, sir, has defeated your better sense, sir, is simply rye-diculous."

Not heeding these caustic remarks, and holding the skin closely in my hand, I stepped over to where they stood, and holding the label near enough so that Coues could read it, I let him see first one side of it and then the other.

"Oh, hold on, Shufeldt, I did not mean that one. Here, let me have that, and you choose some other"—followed by all sorts of humble begging for the return of the specimen. But I was obdurate and paid no heed to all his pleadings, while in a few words I quickly let Ridgway and Elliott know what I held in my possession. The latter at once broke in with one of his usual good-natured, voluble tirades, in which he took all back that he had just said in regard to my modesty and lack of sense, and turning loose on Coues with his raillery, held him up for trusting such a notorious rascal as I was known to be,—and, especially in the matter of being trusted in selecting birdskins from another man's collection.

Ridgway said little or nothing, but his face was a study,—and it was very clear that the Smithsonian was never to be the possessor of the specimen,—which, of course, did not mean much, because it was only a field sparrow, anyway.

In the outcome there was no "hard feelings" left, and the incident in those busy days was soon forgotten, while I kept the skin, and after a lapse of a quarter of a century, have it yet, and the reproduction of a photograph I made of it a few days ago illustrates the present account as to how I obtained it.

THE BIRDS OF POINT PELEE.

BY P. A. TAVERNER AND B. H. SWALES.

(Continued from page 53.)

32. **Botaurus lentiginosus*.—American Bittern.

An abundant summer resident, remaining until late in the fall. Gardner reported seeing a bird on the marsh Jan. 25 and Feb. 13, 1907. Undoubtedly breeds commonly.

33. **Ardetta exilis*,—Least Bittern.

Common summer resident on the marshes, especially near the base along the dyke, where the wetness and softness of the muddy bottom is evidently to its liking. Migration dates on this species, especially in the fall, are hard to get. The local name for the bird on the Point is "Strike-fire," and under that name it was reported by the shooters Sept. 2, 1907, which gives us our latest date.

34. **Ardea herodias*.—Great Blue Heron.

A common summer resident. About four o'clock in the afternoons, both in spring and fall, numbers of them can be seen winging their way from the marshes, where they have been spending the day, to the stakes of the pound nets off shore on either side of the Point. There they balance themselves awkwardly on the swaying ropes, or stand statuesquely on top of the stakes and take toll of the contents of the nets. Sometimes nearly a dozen can thus be seen about one net, and the fishermen regard the fish so taken as no small item. One evening Taverner witnessed them making their way out to their usual stand with the greatest difficulty, against a heavy head wind. Several seemed unable to make it, and returned to content themselves with what they could find along the shore. The wind at this time was blowing about sixteen miles an hour. It was evident that such a wind is about the limit, that the early fall birds at any rate can make head against. In the early morning, Great Blue Heron tracks can be seen all over the sand of the eastern beach, though we have seen but few there during the daylight hours. So it seems that many come to the shores in the night to feed. In early September we have seen them rise up from the marsh in the daytime, when disturbed by shooters, in flocks numbering a dozen or more individuals.

35. *Ardea cerulea*?—Little Blue Heron.

Sept. 22, 1906, we examined a white heron in the possession of Mr. John Conover, then of Leamington. The bird, an old mounted one, was situated so as to be difficult of examination, but as far as we could see it was pure white, without plumes and the legs were painted green. We therefore enter it under this heading with a question

mark, as not being absolutely identified. It was taken, according to the owner, by a Mr. Dan Goyeau near the base of the Point in September, 1904. See Auk XXIV 139-40.

36. **Butorides virescens*.—Green Heron.

The resident hunters call this bird the "Blue Bittern" and seem to be well acquainted with it. It cannot be a very common species or we would have met with it oftener than we have. A great part of the west side of the marsh is well covered with suitable bushes that would form admirable places for them. We have met individuals at various times of the spring and fall and secured one specimen August 30, 1907.

37. **Nycticorax nycticorax navius*.—Black-crowned Night Heron.

Mr. Saunders reports that June 3, 1884, he saw "at least one on the marsh." On the night of Sept. 15, 1906, we heard the hoarse croaks of a bird flying out the Point along the shore that we were certain proceeded from an individual of this species. But it was not until Sept. 2, 1907, that we were able to remove the Night Heron from the hypothetical list when Bert Gardner brought one in that he had killed on the marsh while duck shooting. It was a juvenile bird and is now in the collection of Mr. Taverner. Gardner says that he saw at least a dozen of them. The next day he looked for them again, but was able to find but one, which he was unable to secure.

HYPOTHETICAL.

Some of the old residents tell us of "large white cranes" seen near the base of the Point years ago "as tall as a man." Also of cranes feeding in flocks on plowed fields at an equally early and vague date. These descriptions point very closely to the Whooping and Sandhill Cranes, *Grus americana* and *G. mexicana*. The evidence, however, is not sufficient to admit them formally to the list.

38. *Rallus elegans*.—King Rail.

Observed by Saunders June 6, 1884, and by Klugh and Taverner Sept. 5, 1905. The "Big Virginia Rails" spoken of by the local shooters must, from their description, belong to this species; if so they are much more common than the few above records would lead one to suppose. In fact there is no reason to suppose them less common here than on the neighboring St. Clair Flats, where they are common breeders. Gardner reports one in the marsh, apparently in good condition, on Nov. 30 and Dec. 31, 1906.

39. *Rallus virginianus*.—Virginia Rail.

Observed May 21, 1906, and May 30 and 31, 1907. Our only fall date is furnished by Keays, who noted two Sept. 19, 1901. Within our sphere of operations it has been our experience that the Virginia Rail is nothing like as common as the Sora. It is undoubtedly a reg-

ular breeder and perhaps further careful work in certain portions of the marsh will prove it to be more abundant than our present data leads us to suppose.

40. **Porzana carolina*,—Sora Rail.

A common summer resident and breeder. Sept. 19, 1906, we found certain parts of the marsh alive with them and both juveniles and adults rose readily from the grass. The shooters call it the "Little Rice Bird." Gardner reports that he saw no more after Oct. 9, 1906.

41. **Gallinula galeata*,—Florida Gallinule.

This species, called locally "Rice Bird," is a common summer resident, and without doubt breeds. Our latest record is one reported by Gardner Oct. 9, 1906.

42. **Fulica americana*,—American Coot.

Likely a few breed as we have noted them on all spring visits as late as May 30 (1907), and in the early fall, Sept. 2 (1907). During October their numbers are very largely augmented by the migrants, when large beds of them are to be observed in the center of the ponds, and every little mud hole in the marsh contains several or many.

43. **Philohela minor*,—American Woodcock.

A common migrant and undoubtedly a regular breeder. From the reports of the shooters and our own experience we judge that the number gradually increases the latter end of August until the end of the month, when the vast majority of them leave. We have never found many of them in September, though from August 24 to 31, 1907, they were very common. Sept. 1 they were all gone, and though we stayed until the 6th, no stragglers were seen.

44. **Gallinago delicata*,—Wilson's Snipe.

Reported by the residents to be a common migrant. First fall date, Sept. 19, 1906. Oct. 13 of the same year they were reported very common and the next day along the edges of the Lake Pond we saw about twenty and took several. Gardner reports having seen occasional individuals during the summer months, and a breeding record would not surprise us greatly.

45. **Tringa canutus*,—Knot.

Sept. 15, 1906, on the eastern beach, Taverner secured an immature male Knot. May 30, 1907, he took another, an adult male this time, in very nearly the same place, but on the marsh side of the sand dune. A little later in the day, two more were seen flying by, but were not secured. Both the above birds are in Mr. Taverner's collection numbered 365 and 867 respectively.

46. **Actodromas maculata*,—Pectoral Sandpiper.

Mr. Saunders took this species in September, 1882, and again in the same month of 1900. Taverner took two of three seen on the mud in the marsh near the east base of the Point, Oct. 29, 1905, and we observed the same number in the same place, Oct. 15, 1906. This species does not favor sand beaches as a rule, but is more often found on mud flats.

47. **Actodromus bairdii*,—Baird's Sandpiper.

Mr. Saunders says: "On Sept. 19, 1900, I saw four Baird's Sandpipers on the east beach, of which we got one or two." This remained the sum total of our knowledge of this species on the Point until August 24, 1907, when we found it almost common. Every bunch, nearly, of small waders that we saw contained one or more. We never found them in flocks by themselves, but always a few individuals mixed in with other species. After the 26th they began to thin out with the rest of the waders, and the last was seen August 31. They were easily distinguished from the Least and Semipalmated Sandpipers, when associated with them, by their superior size, and the more general and even suffusion of buffy on the throat and upper breast. In general appearance they seem to be about half way between the Least and Pectoral Sandpipers, though the breast coloration is softer, less streaked and more buffy and general than either. We secured a number of specimens.

48. **Actodromas minutilla*,—Least Sandpiper.

We have noted this little sandpiper much more commonly in the spring than in the fall; indeed, it seems to be one of the earliest fall migrants, arriving in this latitude early in the first week in July, and but a few stragglers remaining after the first of September. Our September dates are all for a few singles seen early in the month, and even when we arrived on the Point, August 24, 1907, there were but few individuals in company with other small waders, and none were seen after the 2d of September. It is always difficult to separate this species from the Semipalmated Sandpiper in life, but when they are both together close attention will reveal the inferior size, redder back and darker breast of the Least. Without doubt this species is a regular and common migrant at both seasons at the Point, as it is at Detroit.

49. **Pelidna alpina sakhalina*,—Red-backed Sandpiper.

Observed by Saunders as late as June 10, 1884, and by us May 13, 1905, when about eleven were seen along the shores of the Lake Pond. May 20, 1906, we saw one, and again another single May 31, 1907. It is a late migrant, both spring and fall, and is likely both regular and common in its occurrence at the Point. We have met it but once in the

fall, Oct. 15, 1906, when about twenty were seen on mud banks in the Lake Pond. Several were taken at this time.

50. **Ereunetes pusillus*.—Semipalmated Sandpiper.

The commonest wader on the beach in the fall. When we arrived on the Point August 24, 1907, we found flocks already there aggregating hundreds. After the 26th their numbers decreased, until after the 30th, when but isolated bunches of from a couple to seven or eight, mingled together with Semipalmated Plover and Sanderling, were met with scattered along the shore. This is about the same numerical condition that we have found on other September trips of the two previous years, and so they continued to our latest dates for the month, Sept. 22, 1906. We saw none Oct. 15 of same year. At Detroit, the Semipalmated Sandpiper arrives in the fall about the last of July and leaves the last of August. It is likely the same at Point Pelee, though as above indicated, a number of individuals linger well towards the end of September. In the spring we have but one good record, Saunders reports it from there June 5, 1884. May 30, 1907, we saw several individuals that we thought were this species, but the conditions of observation were so poor and the chances of mistake so great that we could not be at all certain of our identification. It is likely a late spring migrant here as at Detroit, arriving the latter end of May and departing the first week of June.

51. **Calidris arenaria*,—Sanderling.

It seems evident that the last days of May are the times to look for this beautiful little wader. Saunders found it there May 30, 1884, and again the same date in 1907 it was quite common on the east beach. It has been noted on all September trips, and was very common August 24, 1907, though together with most of the other small waders present then, it much decreased in numbers after the 30th. We saw two as late as Oct. 15 (1906). This is one of the most interesting of the sandpipers. Unlike most of the waders it is frequently seen some distance from the water line and on top of the dunes on the dry sand, though its usual station is just at the water's edge, running forward after each receding wave and nimbly back again just in time to escape being overwhelmed by the next succeeding breaker. They run with great rapidity over the sand and sometimes prefer that method of escaping to flight. At such times it takes a sharp and well sustained pace to walk them down. At times they are absurdly tame, and at one time allowed us to approach within shooting distance and to collect all of a bunch of three, one at a time, the survivors showing not the slightest alarm at the successive reports of a heavy twelve-gauge gun. On the wing, the black and white of their plumage shows up in striking contrast, and when in the bright sunlight they pass over the green water they make a rarely beautiful sight.

We expected to find adults present the latter end of August, but when we arrived at the Point August 24, 1907, all secured were in juvenile plumage. Saunders thought he saw a couple with the reddish breast of the adult bird, but was unable to secure them and no more were noted. It is well known that the older individuals of this species arrive early in the fall and generally depart before the first of the juveniles arrive.

52. **Limosa hæmastica*.—Hudsonian Godwit.

May 13, 1905, Taverner took a high plumaged male Hudsonian Godwit along the strip of clear water that separates the sand dune from the marsh. It stood bunched up under a small bush with its feet just wet with the lapping of the water, uttering a series of short, sharp "cheeps" that first attracted our attention to it. See Auk, XXIII, 535.

53. **Totanus melanoleucus*.—Greater Yellow-legs.

We have seen but two of this species on the Point. Both killed by Gardner on the marsh, Sept. 3 and 14, 1906. The shooters speak enthusiastically of the "big Yellow-legs" they shoot on the marsh in October. No doubt it is a regular and common migrant, though fewer in numbers than the next species.

54. **Totanus flavipes*.—Yellow-legs.

We have only met this species in early September, our earliest date being the 1st, in 1907, and the latest the 19th, in 1906. This gives very little idea of their migrational movement as they arrive at Detroit the second week of July, and by the first of August are present in great flocks. The bulk of them seem to leave about the first of September.

55. **Helodromas solitarius*.—Solitary Sandpiper.

We have met but single individuals of this species on the Point in various September visits, viz. the 11th and 16th, in 1905, and the 6th, in 1907. Saunders also saw one the latter year, August 28. Both the latter were observed in a drainage ditch at the base of the Point. Indeed, Point Pelee is not ground suitable to their tastes at all, and unless some are to be found on the mud banks scattered through the marsh through July and August their occurrence at all is likely accidental.

56. **Tryngites subruficollis*.—Buff-breasted Sandpiper.

August 29, 1907, Taverner took a male at the extreme end of the final sand spit at the end of the Point. It was in company with a small bunch of Semipalmated Sandpipers and Sanderling. It seemed quite tame and was easily secured. It is numbered 924 in the collector's collection.

57. **Actitis macularia*,—Spotted Sandpiper.

A common summer resident and breeder. In June, 1884, Saunders found this species breeding so abundantly on the west shore, "That a short walk was nearly sure to flush one from the nest." Unlike all the other waders that occur on the Point it is at all times of its occurrence as common on the west shore as on the east. We have always found it in numbers in May, but our fall visits have usually been a little late to find more than the stragglers. Sept. 3 to 18, 1905, we saw from two to four daily. In 1906 it was common from the 1st to 3d, but from the 15th to 22d, our later visit, we saw but a couple the first date and one the 21st. There were quite a number present from August 24 to the end of the month, in 1907, but after that it was but stray individuals and couples that were noted. One of these last was caught in the hand by Mr. N. A. Wood, being incapable of sustained flight. On dissection nothing could be discovered to account for such a condition except that it was so abnormally fat that the conclusion was almost forced upon us that it was too fat to fly.

58. *Numenius hudsonicus?*—(Hudsonian?) Curlew.

The residents tell us of the flocks of Curlew that visit the end of the Point in June. Saunders records Curlew in June, 1884; and May 30, 1907, he and Taverner saw a flock of 15 on the east beach. No specimens have been secured and the exact specific designation of the individuals seen remains in doubt. As Saunders says, "The Hudsonian has always been an abundant migrant on a certain few days in the spring, at favored localities, and the other (Long-billed) always rare." Further researches have convinced us that we would be warranted in putting the case in even stronger language than this, and the probability, almost amounting to certainty, is that these are Hudsonian Curlew, but until specimens are actually examined the species must be regarded as hypotheical.

59. **Squatarola squatarola*,—Black-bellied Plover.

A common fall migrant. We have no record of its occurrence in spring. We have found numbers of Black-bellied Plover on the beach and the mud banks of the marsh on all September visits, and took one Oct. 15, 1906. Sept. 15, 1905, five or six were observed with black underparts and the next day Klugh saw a couple more in like plumage; but it was not until August 25, 1907, that any such specimens were taken. For the first three days after this date all seen were in varying stages of the black phase. Then a white-belly was taken and the black ones decreased in numbers until the 29th, when the last one was observed; after which all were white underneath. In common with most of the waders the adults seem to arrive in the fall earlier than the juveniles, and to leave first. It is rare to find a straggling adult after the rest of its kind have left, but the younger birds often linger on for a long time after their elders have gone. This species is

readily distinguished from the Golden Plover in life by its black, instead of gray, axillaries that in flight stand out prominently from the general gray of wings and sides; and the rather prominent white rump that in certain conditions of flight is very noticeable.

60. **Charadrius dominicus*,—American Golden Plover.

We have met the Golden Plover but twice, both times in the fall, Sept. 15, 1905, and Sept. 19, 1906. Gardner reported seeing eight on the marsh Sept. 2, 1907. This completes the record for the Point to date. The shooters tell us that in October great numbers are found on the marsh, and though we can not always tell which of the two large plover are referred to, the time is more in keeping with the habits of the Golden than the Black-bellied, as it seems to be a much later migrant in the fall than the other.

61. **Oxyechus vociferus*,—Killdeer.

The Killdeer is not a common bird on the Point itself, though they seem usually common on the mainland near the base. In our September visits we usually see or hear one or two every day. They seldom alight on the beaches or mingle with the other waders found there. They undoubtedly breed on the cultivated fields at the base.

62. **Ægialitis semipalmata*,—Semipalmated Plover.

We have but two or three records for this species in spring. In May, 1884, Saunders met it on the Point, May 20, 1906, three, and May 30, 1907, we saw two. During all fall trips, however, it has been plentiful. Oct. 29, 1905, Taverner took one. All fall birds so far seen or taken have been juveniles with the black of the head and breast replaced with dingy brown. We expected, August 24, 1907, when we arrived at the Point, to find the adults still there, but were mistaken. At Detroit the adults go through about the middle of August and do not stay long. As a rule two weeks covers their sojourn, but it is seen as in other species, that the younger individuals linger much longer than the adults. As a rule they occur on the beaches of the Point in little groups of three or four in company with Semipalmated Sandpipers and Sanderling, and no wader group is complete without one or more.

63. **Ægialitis meloda*,—Piping Plover.

No wader is nor could be more daintily pretty than this little species. Its delicate, tasteful coloration, combined with its clear whistled pipe as it flies out over the blue water, and from which it has taken its name, make a rare combination that, together with the smooth beaches upon which it runs, and the adjoining waters reflecting the blue skies overhead, arouses a sentimental interest more lively than any other shore bird is capable of awakening. It is a common summer resident and regular breeder on the east beach. We have found them there on each May visit and usually discovered nests and eggs. The

nest is merely a shallow depression in the sand and is usually placed among the small stones that occur on the top of the dune where the last great storm has washed them. They are inveterate nest builders. May 13, 1905, we counted forty-five nest-like hollows made by one pair of birds. Though the labor is nothing like as great, in point of the number of nests, this bird has the nest-building mania of the Marsh Wrens beaten all hollow. This date we found no eggs, but previously Saunders took them May 30, 1884, and May 24, 1887, and a few days later observed a young bird. May 30, 1907, Saunders found two sets, one of four and the other one. The species leaves early in the fall and is usually gone by the first of September, as before 1907 we never met the species on our fall trips. August 24, however, of that year we found a number mingled with the other small waders on the beaches. All seen then or later were juveniles, as the adults had already gone. The last seen were Sept. 2. Strangely enough Saunders reports that on the occasions of his early visits in 1882 to '87, all breeders seen had the divided breast band of the type form, while of late years all have been attributal to the variety *circumcincta*. We are aware that this subspecies has been discarded by the committee on nomenclature, but it is interesting to note that there has been this change in the type of coloration of the species in this locality in late years. The fall birds taken in 1907, however, all show the divided band; though this is likely the result of juvenility.

64. **Arenaria morinella*.—Ruddy Turnstone.

A regular migrant and likely a more or less common one both spring and fall. Saunders took one June 5, 1884; and May 30, 1907, we noted and took several. In the fall we have met them at various times between August 24, 1907, and Sept. 16, 1906. They were far more common in 1907 than any other fall that we have been on the Point, and for the first few days a couple or so were always to be seen with the larger flocks of other waders. Previous years we had only seen single individuals. They are a little more suspicious and difficult to approach than the other inhabitants of the beach, and it took careful stalking to secure what we did. In life their superior size when mixed in with other waders is not so striking as one would suppose from the written measurements or a comparison of their skins.

65. *Colinus virginianus*.—Bob-white.

Saunders states, "Not very common in 1884, although found nearly to the end of the Point, at least as far as the cultivated lands reached." Personally we have never met it on the Point proper, though that is likely the result of our not working the more cultivated sections. Keays noted but one Sept. 19, 1901, and we flushed a couple on the mainland near the base May 13, 1905. Sept. 20, 1906, Saunders saw ten near the dyke, and August 20, 1907, and Gardner reported a covey of about thirty. The local sportsmen tell us that it

was formerly an abundant bird and that still a few coveys frequent the edges of the clearings. The Quail did not seem to suffer during the rigors of the winter of 1903-04 in this section of Ontario as they did in adjoining localities in Michigan.

EXTINCT.

Bonasa umbellus,—Ruffed Grouse.

Old residents tell us that the Partridge was once a very common game bird on the Point, but now none have been seen for years. This woodland bird cannot stand civilization as the Bob-white does and is now only to be found in the deepest parts of the more extensive woods. There are no such woods on the Point and they are getting scarcer and scarcer in the adjoining country as their sites are being cleared up and made into corn and wheat fields.

EXTINCT.

Melcagris gallopavo.—Wild Turkey.

Formerly the Wild Turkey was exceptionally common in Southern Ontario. Gardner states that they were numerous on the Point in his memory and the last one taken he connects with certain births and marriages and gives the date as about 1878.

EXTINCT.

**Ectopistes migratorius*,—Passenger Pigeon.

The older residents remember the vast flocks of Pigeons that once migrated through the Point. They were still more or less common in 1882, as Saunders says, "In 1882, my stay there extended through the last days of August, and a week or so in September, and during that time we often saw small flocks of Passenger Pigeons, running up to perhaps fifteen or twenty. They would rush up the Point or down, as the case might be, at a speed which was all their own, and which is rarely equaled, to my way of thinking, by any other bird. I have one specimen from that trip, although we shot several. It is a male, labeled August, 1882."

66. *Zenaidura macroura*,—Mourning Dove.

We have never found this a common species though we have met individuals during all our trips in May, September, and October. Gardner reported several that remained throughout the winter of 1906-07, frequenting the vicinity of the barn yards.

67. *Cathartes aura*,—Turkey Vulture.

May 20, 1906, two vultures flew directly over our heads near the end of the Point. It may prove to be a not uncommon species, as we have what seem to be pretty well authenticated reports of a pair that are regular summer residents near Harrow, about fifteen miles west of

the Point and a few miles inland. The birds we saw were flying very low and we had a magnificent view of their wonderful flight.

68. **Circus hudsonicus*,—Marsh Hawk.

A common hawk, and seen almost every day on all our visits, beating slowly over the marsh-lands or soaring over the woods. It was still common Oct. 15, 1906. Gardner observed them during the winter of 1906-07, Dec. 1, Jan. 25, Feb. 13 and 23. As early as March 9 we saw two old blue adults beating over the still frozen marshes and the snow covered meadows.

69.**Accipiter velox*.—Sharp-shinned Hawk.

The most interesting phenomena we have observed at the Point centers about this bird. We have met this species only occasionally on our May trips, but in the fall there is a truly astonishing flight composed almost entirely of juveniles. This flight seems to be a regular annual occurrence and is looked for and expected by the residents. Saunders first saw the flight in 1882 and described it to us in such glowing terms that it sounded like exaggeration. However, on Sept. 10, 1905, we saw for ourselves and only wondered at the restraint that he had used. Since then we observed the same thing in 1906, and our latest reports from Gardner, the middle of September, 1907, advises us that like conditions prevail again. Our earliest Sharp-shin date is August 30, 1907. In 1906 we saw one Sept. 3, and the year previous there were some numbers present on our arrival Sept. 4.

After the coming of the first in the fall their numbers steadily increased until from six to a dozen can be noted in a day, which in most localities would be accounted common. Then there came a day, Sept. 11, 1905, and Sept. 15, 1906, when the morning's tramp found Sharp-shins everywhere. As we walked through the woods their dark forms darted away between the tree trunks at every few steps. Just over the tree tops, a steady stream of them was beating up and down the length of the Point, while in the air they could often be discerned at every height until the highest looked like a mote floating in the light. As concrete illustrations of the number present:—In 1905 we stood in a little open glade and at various times of the day counted from twenty-five to thirty in sight at one time and Saunders writes, "When I saw the flight in 1882 it was probably even greater than in 1905. There were more Sharp-shins than one would suppose were in Ontario, and one day my brother and I stood thirty paces apart, facing each other, with double-barrel, breech-loaders, and for a short time the hawks passed so thick that we had to let some go by unmolested because we could not load fast enough to fire at each as it came." A farmer told us of sitting in his front yard one afternoon and shooting fifty-six without leaving his chair.

Early in the morning of the arrival of the flight there seems to be

some regularity in their movements. First there is a steady stream out the Point, then it flows back again towards the base and then out again. This movement, however, is not very marked and by ten or eleven o'clock it is lost entirely and it is every bird for itself. This great abundance lasted, in 1905, three days, and the next year four, when they gradually began to thin out, though to the latest of our stay (the 22d, in 1906), they still remained more than common, and at least fifty could be observed in a day. All this time there was a steady stream flying across the lake towards the Ohio shore. Near the extreme end of the Point is a wooden observatroy tower built by the U. S. Lake Survey for the purpose of making observations on the changes of the shore contour. It is about fifty feet high, and stands with its base in the red cedar thicket whilst the platform rises well above all surrounding foliage. On this vantage point Saunders and Taverner took their stand the 18th, and with watch in hand counted the Sharp-shins that passed, nearly all within gunshot. From 11:24 to 11:54, 281 passed us, 207 making for the end of the Point and 74 returning, making 133 that started across the lake within half an hour. As far as we could make out without remaining on the spot the whole time this rate was kept up all day and every day of the greatest abundance of the species. The 13th was the last day of the great flight in 1905, but Swales, driving into Leamington, five miles from the base, found them as common the whole way between as they were on the Point itself. As he drove along every field had its quota of hawks and at times every fence post supported one. Even in the business section of Leamington he saw a number.

The hawks were very bold and fearless, dashing by us often so closely that we could feel the wind on our cheek from their wings. Quite often it happened, once three times in one day, that just as we had our guns aimed at a bird we wished to collect, there was a swoop of a dark body, a few choked twitterings from the victim, and our intended specimen was carried off in the talons of a rapacious little freebooter. The effect of this great abundance of hawk life upon the smaller birds and mammals was very marked, and they kept in close covert. The Blue Jay could hardly be made to forsake its grapevines, and when at last forced to do so glided swiftly and silently to the nearest cover, reserving expression of its pent-up feelings until within safe recesses again. The Brown Thrasher and Towhee preferred to slink deeper within their tangle, on our approach, than to seek a new one; and the Red Squirrels overhead hurriedly gathered what nuts they could and scurried away to their hollow trees, refraining from scolding us until safe within their woody fastnesses again. When, however, forced into the open by hunger the first sight of a hawk caused many of the small birds to "freeze" instantly and then they would remain absolutely still until the immediate danger had passed, and in all cases noted such birds were

passed by unseen. Indeed it seems that hawks and, in fact most other birds, recognize life almost entirely by its movement and not by its form and color. A perfectly stationary object is usually regarded as inanimate and we have seen a hawk pass right by a flock of Cedar Waxwings in the top of a dead and bare stub when they thus "froze."

At times the Jays seemed thoroughly to enjoy conditions and delighted to get in the middle of a safe thicket and "jay" their loudest. No sooner was the first note uttered than a hawk was on hand dodging around the retreat in the wildest fashion, while the jay within shrieked with well feigned fear, but apparent delight. In fact the Blue Jay is a canny bird, and though the remains of other species were commonly met with, scattered over the ground around some little knoll or log, we recognized their blue plumage but once. The flicker too, fared well, though subject to constant attack from the ferocious little *Accipiters*. They did not even curb their voices as other birds did and, though frequenting the most exposed dead tree tops, seemed the most care free of any of the birds. Many times we saw a hawk strike at them, but each time just when we thought it was all up with the flicker there was a little scramble to the other side of the trunk and the hawk was sailing away to make another strike. But it was a one-sided game. The flicker had but a circle of a few inches to describe and the hawk one of many yards, and never to our knowledge was the flicker one instant too late.

The loss of life at such times must be immense. We were continually finding the bunches of scattered feathers that marked where some songster had met its end. During the first few days before the heavy flight the cuckoos suffered most severely, but the main body of hawks seem to follow the migrating Olive-backed and Grey-cheeked Thrushes and they formed the staple food supply during the height of the flight, though we recognized Towhees, Red-eyed Vireos, Brown Thrashers, Chipping Sparrows, Wood Pewees, various Warblers, and Catbirds amid the debris.

In spite of all this, however, most of the hawks collected had empty stomachs, likely the well fed ones were those that circled high in the air, while the ones that fell to our guns were the hungry hunters, made bold by their hunger. Nearly, if not quite, all of the birds composing this flight are young of the year. Of the 281 observed from the tower all but two or three of them were positively made out to be in this plumage, while the others were viewed under such conditions of light and distance that no definite determination could be made. All taken were also Juvenile; in fact the only adult we ever took at the Point was one taken Sept. 5, 1907, and before the flight had started.

Most birds migrating from Point Pelee make for Pelee Island that lies in full view out in the lake, but neither the Sharp-shin nor the

other hawks do so. Instead they take a course nearer the Old Dummy Light and well to the east of the island. As far as we could discern their forms with our glasses they followed a straight and undeviating course that would land them on the Ohio shore some four or five miles to the east of the city of Sandusky. It would be most interesting to work this shore at the right season and see just where they do enter American territory.

On the mainland the flight seems to come from the east. Saunders says, "Since then (1882) I find it well known by the farmers that there is a hawk flight (of these birds no doubt) west along the north shore every year." It is certain that it must take a large area of territory to furnish this great number of hawks on migration, and it is an indication of the extent of country drained by this migration route. We have also heard that there is a return flight in spring, some time in April, but we have never seen it and are unable to say what are the species participating in it. It is said, however, that this spring movement is nothing like as great as the fall one, but it is regular and well enough marked to be noted by the farmers and other residents.

Altogether, it will be readily understood that this flight made a great impression upon us all, and as it seems unique, in many of its phases, in the annals of ornithology, it forms one of the most important and interesting memories of Point Pelee.

70. **Accipiter cooperi*.—Cooper's Hawk.

A fairly common hawk, and through all our summer visits we have usually seen a few daily. They do not seem to increase in numbers during the Sharp-shin migration, and the only tendency to a "flight" of this species that we have observed was Oct. 14, 1906, when fifteen were seen or taken. Several were noted May 30 to June 1, but we have no other spring dates, and our earliest fall one is August 28, 1907.

71. **Accipiter atricapillus*.—American Goshawk.

The fall of 1906 was notable for the abundance of Goshawks in certain parts of Ontario, and Point Pelee got its share of them. The first intimation we had of their presence was a large hawk that we could refer to no other species seen October 15 near the end of the Point. It was not until Oct. 21 that our identification received confirmatory evidence when Gardner sent us an adult male, followed by others Oct. 23 to Nov. 14—ten birds in all. Gardner reported them until Jan. 18, when the last one was seen (see Auk XXIV, 1907, p. 142). The flight in this section seemed confined to the Ontario-Michigan boundary and its immediate vicinity on the Canadian side, and there were no reports of any having crossed the lake into Ohio.

72. **Buteo borealis*.—Red-tailed Hawk.

We have never found any of the *Buteos* common at the Point.

Saunders says, "On the occasion of the hawk (Sharp-shin) flight of 1882 one of these was taken and a very few others seen." Keays reports one Sept. 21, 1901. In 1905 we usually saw one a day, but during our September visits of 1906 we saw but one single bird. Gardner sent us one bird Nov. 16 the same year. From August 24 to Sept. 6, 1907, we generally saw from one to three birds daily. We do not think that any Red-tails breed on the Point.

73. **Buteo lineatus*.—Red-shouldered Hawk.

The Red-shouldered Hawk, contrary to what we should expect from our experience here at Detroit, is the rarest of the *Buteos* on the Point. Keays reports one Sept. 19, 1901, and two *Buteos* seen by us Sept. 8, 1905, were probably of this species. Single individuals were noted Sept. 1 and Oct. 14, 1906, and again May 31, 1907. Three or more were seen Sept. 21, 1906, and an immature was presented to us taken about Feb. 28, 1907.

74. **Buteo platypterus*.—Broad-winged Hawk.

This species seems to arrive in the fall, about the last of August, our earliest date being August 26, 1907, but it does not appear in any numbers until the main body comes down with the Sharp-shins. Even then not more than a dozen have been seen at any one time (Sept. 18, 1906). Keays listed but three in September, 1901. Oct. 14, 1906, is our latest date. We have no spring records.

75. *Archibuteo lagopus sancti-johannis*.—American Rough-legged Hawk.

Saunders saw one August 25, 1907, near the end of the Point as it flew by at short range. This is an unusually early record for this section and likely gives no indication as to its migrational dates at the Point. Saunders is very positive as to his identification and it forms our only record. It must, however, undoubtedly occur in late fall and early spring in some numbers. We lack personal experience on the Point at such times.

76. *Haliaetus leucocephalus (alascanus?)*.—(Northren?) Bald Eagle.

As no specimens of this species have been taken the exact sub-specific name of the breeding form must remain hypothetical, but in all probability it will prove to be the Northern form. A pair breed annually on the mainland near the base of the Point. May 13, 1905, we noted the nest in a tall tree in a small patch of woods about a mile inland. A magnificent adult with white head and tail was beating about, and with our glasses we could make out the eaglets perched on the rim of the nest. During all our visits we have noted from one to four eagles almost daily. Usually those seen are immatures, but occasionally a fully adult bird flies over. Likely all those noted in early and middle fall are of the same family before men-

tioned. Gardner informs us that they are occasionally seen through the winter. Sept. 18, 1906, we were watching an eagle soaring over the lake, when all at once it lowered and seemed to plow along the surface of the lake for a short way, throwing up a dash of spray on either side, and then rose with something in its talons which it bore away to its perch on a tall tree-top. This is the only time that we ever saw them pick up anything from the lake, though we think they feed quite largely on the dead fish that are washed up on the beach. Oct. 29, 1905, Taverner found the remains of a half grown turkey, at the edge of one of the fields, that had evidently been devoured by some bird of prey. The eagles seem to be the only ones capable of this. Several times during the Sharp-shin flight we noted eagles so pestered by aggressive little *Accipiters* that they were forced to soar away from the vicinity.

77. *Falco peregrinus anatum*,—Duck Hawk.

A regular and not uncommon migrant in the fall, but we have never seen it in spring. All have been sight records, but the peculiar outline and wing action of the Duck Hawk make its identification almost certain when one has had enough experience with the species to become acquainted with its distinguishing traits. We have seen individuals as follows: Sept. 8, 1905, Sept. 19 and 21, 1906, August 28 and 30, 1907. The shooters know it very well and refer to it as that "Big, black, long-winged Hawk," so it must occur in some numbers. Taverner had an interesting sight of one of these birds in action on Lake Muskoka, Ontario. A flock of Blue Jays was passing over the lake when suddenly down swooped a Duck Hawk, into and through their midst, like a dark brown thunderbolt. As he passed he reached to left and right and seemingly at the touch of his talons two lifeless bodies dropped into the lake. Then, while the surviving Jays fled shrieking away, the bold marauder, with a long, circling sweep, returned, and passing, recovered the floating bodies without as much as wetting a toe. The whole strike and return was executed so quickly that it seemed to occupy no more than a couple of seconds' time, and well justified his name of "Bullet Hawk."

78. **Falco columbarius*,—Pigeon Hawk.

Keays saw two Sept. 17, 1901, one of which was taken. May 13, 1905, we saw one as it flew by close to us on the eastern shore. Since then we have noted single individuals Sept. 16, 19 and 21, 1906, and August 31, 1907. Saunders gives an interesting experience he had with this species, which parallels that of Taverner's with the Duck Hawk as described under that species. He says, "We had fired at and wounded a Black-bellied Plover which was flying over Lake Erie. The wounded bird was at once pursued by this falcon. Attaining a height of thirty or forty feet above the plover, who was only five or six feet above the water, the falcon swooped and missed—the plover

dodging. Again he rose and swooped, and again missed. This was repeated perhaps six times, the birds drawing away northeast towards the mainland, when finally the falcon was successful and struck the plover, knocking him into the water. He then rose, and with a careful swoop, picked him up and flapped away to the Point and we saw him no more."

79. *Falco sparverius*.—American Sparrow Hawk.

On the Point proper this is not a common hawk even during migrations, and we do not think that it breeds there, though there is plenty of ground that looks eminently suitable. Bearing in mind that Sparrow Hawk flights have from time to time been reported we have looked for something of the sort here, but so far in vain, and careful questioning of the shooters has elicited no information that points towards its probability. Indeed it seems as if this species avoids the Point on its migrations as we have several times, Sept. 4, 1905, and Sept. 3, 1906, found it more than ordinarily common on the mainland and basal quarter of the Point, while scarce as usual on the outer portions. We have noted them occasionally on all September visits, but rarely more than single individuals, though August 24 to Sept. 6, 1907, a pair hung around the waste clearings near the extremity of the Point and we saw one or both nearly every day.

80. **Pandion haliaetus carolinensis*.—American Osprey.

A not uncommon spring and fall migrant, have not heard of any breeding. Saunders saw a few in September, 1882. We have noted it on the following dates.—Sept. 6, 1905, one; Sept. 16, three; and 18, one; and two Oct. 13, 1906. Received one male from Gardner, taken May 10, 1907, and from August 24 to Sept. 6, 1907, we saw individuals each day. Though eagles are rather plentiful we never saw one molest an Osprey.

81. *Asio accipitrinus*.—Short-eared Owl.

Personally, we have never met this bird on the Point, though the shooters have often referred to the "Marsh Owl" as sometimes very common on the marsh. Their description allows no doubt as to what they refer to. Without doubt this is an occasional winter resident, as in adjoining localities. Gardner reported one Oct. 13, 1906, and as common some time previous to then, and his letters refer to one seen Jan. 18, 1907, so some may remain through the winter.

82. **Otus asio*.—Screech Owl.

Heard commonly on nearly all fall trips and once in May, 1907. In all likelihood a regular breeder. Two have been taken—both in gay phase. Some of our pleasantest memories of Point Pelee are connected with this pretty little bird. As we sat in our tent in the evening, preparing specimens and writing the notes of the day, the soft, gently descending tremulo of its song would reach our ears from the black-

ness of the woods across the road. Occasionally two would be heard answering each other across the dark gulf overhead and the effect was very far from unpleasant. One night one was heard closer than usual and one of us stole out and stealthily followed up the voice. There was an open glade not far away with a lonely, stunted and twisted oak in its center. In this tree the little owl sat and repeated his love song over and over. Shortly it was joined by another and they sang duets in the well known quaver, but to the hearer below came fragments of cooings and gurgles in between such as he never thought an owl could utter. To attempt to set them down in cold print would, if possible, rob them of their delicate beauty and destroy the sentiment. Besides, we could not do it and retain a shadow of our self-respect. The long, loud quaver was, of course, for the whole world to hear, and to it you would be welcome; but the low parts between were as certainly for no other ears than the little grey-tipped ones by his side, and to blazen them forth and caricature them before the world's unsympathetic eye would be the act of a veritable cad. The night may have had something to do with it, the velvety blackness, the starlit sky and the murmuring of the waves on the shore, but taking into consideration all these influencing surroundings we think that few sounds in nature are as sweet as the love song of this little square gentleman in grey with the big yellow eyes whom hardened naturalists call "Screech" Owl.

83. **Bubo virginianus*,—Great Horned Owl.

Not common, though doubtless a regular migrant and winter resident. Sept. 13, 1906, Gardner shot one near his barn. Specimens were sent us from the Point Nov. 13, 1906, and Feb. 23, 1907, and another was noted March 7 and May 31 of the same year. In spite of this late record we have been unable to get any evidence from the residents that it breeds.

84. **Nyctea nyctea*,—Snowy Owl.

Oct. 29, 1905, Taverner chased an early bird down the entire length of the east beach. It was quite tame and several times he got close enough to make out that it was very white with hardly any dark on the breast and but few spots on the wings and back. It did not fly very far on being disturbed, and always chose some small elevation to alight upon, such as a log of drift wood, or other jetsam cast up by the waves. Trees were never so used, though there were several cottonwoods scattered along the way, but any tall stake or fence post was taken whenever available. Its snowy plumage could be seen for miles against the tawny grasses and yellow sand of the beach. No more birds were reported that winter, but Oct. 30, 1906, an almost pure white one was sent to us and another in more ordinary plumage Nov. 7. No more were reported for the remainder of the winter. See Auk XXIV 1907, p. 143.

ALEXANDER WILSON IN BIRD CENSUS WORK.

BY FRANK L. BURNS.

The many-sided Alexander Wilson has published, in the preface of Vol. IV, pp. V-X of his American Ornithology, dated September 12, 1811, probably the earliest bird census of this country. As it is found in only the earlier editions and consequently is inaccessible to most of my readers, I quote in full:

"To the philosopher, as well as the naturalist, and to every man of feeling, the names, migration, and immense multitudes of birds in this country, are subjects of interesting and instructive curiosity. From the twenty-first day of March to the first of May, it might with truth be asserted, that at least one hundred million of birds enter Pennsylvania from the south; part on their way farther north, and part to reside during the season. This is no extravagant computation, since it is allowing only about four hundred individuals to each square mile; though even those resident for the summer would probably average many more. Our forests at that season are everywhere stored with them; and even the most gloomy swamps and morasses swarm with their respective feathered tenants. In Mr. Bartram's Botanic garden, and the adjoining buildings, comprehending an extent of little more than eight acres, the Author has ascertained, during his present summer residence there, that not less than fifty-one pairs of birds took up their abode, and built their nests within that space. Almost all of these arrived between the above periods, besides multitudes of passengers. Every morning (for evening, night and morning seem their favorite hours of passage) some new strangers were heard or seen flitting through the arbors, until one general concert seemed to prevail from every part of the garden."

Wilson's figures are apparently based upon the assumption that the vernal migration progresses as a rule directly northward. The 250,000 square miles of territory required in his computation would extend from the southern limits of Penn-

sylvania to about the northern timber line. On the whole his estimate of 400 birds to the square mile would doubtlessly prove conservative for even present times. In his detailed list following, we have something tangible, and it has occurred to me that by the platting of a familiar tract of equal extent a comparison of the present and past in actual numbers of species and individuals might be not altogether impossible. My tract consists of one and one-half acres of fruit and shade trees, together with several buildings comprising my house; three and one-half acres of hedge, bush-and-brier-tangle bordered pasture; almost three acres of open thicket connecting the rear; and a small plat of a few square rods containing a few evergreens, joining the west front —about eight acres in all. True this tract lacks many of the essential features of the historic garden—the abundance of dense foliage, the buildings suitable for swallow and Phoebe, the damp meadow fed by the Schuylkill, and the proximity to the great Delaware—yet it is perhaps almost equally free from molestation, within the same faunal zone, and at no great distance (about 15 miles) from the scene of Wilson's labors.

The Swamp Sparrow has not been found as a breeder in this neighborhood, the Yellow Warbler is altogether uncommon, and while the Baltimore and Orchard Orioles, the Martin, and the Warbling Vireo have more or less frequently nested within this tract, they have only been present as callers the past season. Then the three acres of thicket has been turned into a section of a private park of late years, and in consequence it has lost not a little of its attractiveness to brush-loving birds.

A comparison of the number of individuals representing the species found in either place shows that six have practically held their own, one increasing materially, and while four species have decreased in number this would seem to be compensated for to a great extent by the increase of additional species, all of which are of undoubted benefit to mankind, excepting the Waxwing and European House Sparrow. On the whole, with the single exception of the Purple Martin, we

apprehend small grounds for fear of local extinction of any species named below, at least for some time to come:

Wilson, 1811. At Gray's Ferry only	No.	Present at both Gray's Ferry and Berwyn.	No.	Burns, 1907. At Berwyn only.
			2	Yellow-billed Cuckoo.
			2	Northern Flicker.
	4	Chimney Swift	4	
			2	Crested Flycatcher.
Phoebe	2			
	2	Wood Pewee	2	
Orchard Oriole	6			Sometimes present.
Baltimore Oriole	6			
	8	Purple Grackle	5	
			2	American Crow.
			2	Americaa Goldfinch.
	16	Chipping Sparrow	4	
Swamp Sparrow	2			
	2	Indigo Bunting	2	
			2	Towhee.
	?	Scarlet Tanager	2	
Purple Martin	2			Sometimes present.
Barn Swallow	20			
			2	Cedar Waxwing.
			4	Red-eyed Vireo.
Warbling Vireo	4			Sometimes present.
	2	White-eyed Vireo	?	
Yellow Warbler	6			
			4	Oven-bird.
			2	Kentucky Warbler.
	2	Yellow-breasted Chat	2	
	10	Catbird	10	
			2	Brown Thrasher.
	10	House Wren	2	
			4	Wood Thrush.
	2	American Robin	12	
			10	English Sparrow.
19 species	114	Individuals	95	25 species.

ASPECTS OF THE SPRING MIGRATION OF 1907.

BY LYNDS JONES.

The spring migrations of the past season have so far receded that it is possible to view them in proper perspective. The migration phenomena were so surprising in many of their aspects that one became almost bewildered in his effort to properly follow the changes and exceptional features.

If anyone ever inclined to a doubt of the profound effect which weather has upon the movements of the birds such doubt must have been effectually dispelled long before the close of the last vernal migration season. Here in northern Ohio there was nothing unusual in either weather conditions

or bird movements until March 21st, although a considerable flight of ducks, blackbirds, and the earlier sparrows occurred on March 17th and 18th. On the 21st the temperature reached 63°, and on the following day 78°, with summer temperatures prevailing and no frosts at night until April 5th. It was during this period that reports reached me from Sandusky, through Prof. E. L. Moseley, that not only swallows but Chimney Swifts, Nighthawks, and Ruby-throated Hummingbirds were seen there on more than one occasion. I am bound to state, however, that none of these birds were seen by him, but the reports came from what seem to be reliable sources. During this period twenty-five species arrived in Oberlin, none of them being very exceptional. Following this two weeks of summer the temperature dropped and remained low enough for frosts on many nights, with occasional and short periods of seasonable temperatures, until May 11th. During this cold period the sky was usually lowering, especially so at night, and rain or snow was frequent. The only movement of any consequence that occurred during this period was on April 29th, following a warm day and clear night, when thirty species arrived, and with them a marked increase in the numbers of many other species which had straggled in despite the unfavorable weather. Low temperatures and heavy weather followed immediately. May 11th the temperature began to rise and the sky clear and conditions for a large movement improved on the 12th. Along the south shore of Lake Erie the 13th was not only the banner day for the year but it proved to be a record breaker in every particular. Not only were the species recorded more numerous than on any previous day in the experience of the writer, but most of the species were represented by unusual numbers of individuals.

One of the exceptional features of the flight of April 29th was the great flight of hawks during the early part of the day. The Sharp-shinned and Broad-winged were present in uncountable numbers, and mixed with them or hawking over the marshes we recorded Marsh, Pigeon, Red-shouldered American Sparrow, American Rough-legged, and one other whose identification could not be certainly determined. The

Sharp-shins were generally found among the shrubbery while the Broad-wings were soaring about overhead or passing slowly eastward.

Continued adverse weather conditions to the end of May resulted in June records for many of the warblers which are usually upon their nesting grounds north of Ohio by May 25th. Indeed, there was scarcely any diminution in the numbers of many of the transient warblers up to May 28th, when the writer's work was concluded.

In view of the extensive area covered by the exceptional weather conditions and consequent exceptional migrations of the birds, it seems to the writer worth while to present in tabular form three "All Day" records made during the last great movement of the birds. Two of these are from Ohio, but since one represents the lake shore fauna and the other the strictly inland fauna they should be considered supplementary. The third record was made at Princeton, New Jersey, in the line of northward movement for the birds belonging to the Atlantic Plain fauna. Rev. W. F. Henninger contributes the record from Tiffin, Ohio; Mr. Charles H. Rogers the record from Princeton, New Jersey; and the writer, with the assistance of two friends, the record from the south shore of Lake Erie, particularly from the sand spit reaching out into the lake to Cedar Point opposite Sandusky, Ohio. The last named record was made on May 13th, the others on May 14th, 1907:

	Oberlin, O.	Tiffin, O.	Princeton, N. J.
Pied-billed Grebe	3	1?	
Herring Gull	20		
Bonaparte's Gull	10		
Common Tern	C		
Black Tern	10		
Double-crested Cormorant	1		
Red-breasted Merganser	7		
Black Duck	20		
Blue-winged Teal	3		
Lesser Scaup Duck	C		
Bufflehead	1		
Ruddy Duck	50		
American Bittern	20		
Least Bittern	1		
Great Blue Heron	5	1	1

	Oberlin, O.	Tiffin, O.	Princeton, N. J.
Green Heron	5	C	4
Black-crowned Night Heron		1	1
King Rail	1		
Virginia Rail	C		
Sora	C	1	
Florida Gallinule	C		
American Coot	C		
American Woodcock	10		
Greater Yellow-legs		1	
Yellow-legs	2	2	
Solitary Sandpiper	1	2	5
Bartramian Sandpiper	2	4	
Spotted Sandpiper	C	C	47
Killdeer	2	C	2
Semipalmated Plover	2		
Piping Plover	2		
Bob-white		5	
Mourning Dove	C	C	7
Turkey Vulture		1	1
Marsh Hawk	3		1?
Sharp-shinned Hawk	C	1	
Red-shouldered Hawk	1	1	
Bald Eagle	2		
American Sparrow Hawk	10	2	3
Cooper's Hawk		2	
Belted Kingfisher	10	3	4
Yellow-billed Cuckoo	10	2	
Black-billed Cuckoo	10	1	
Hairy Woodpecker		2	1
Downy Woodpecker	3	3	13
Red-headed Woodpecker	C	C	
Northern Flicker	C	C	21
Whippoorwill	C		
Nighthawk	2	1	
Chimney Swift	C	C	82
Ruby-throated Hummingbird	1	1	1
Kingbird	C	C	48
Crested Flycatcher	C	2	2
Phœbe	few	C	7
Olive-sided Flycatcher	30		
Wood Pewee	C	C	
Yellow-bellied Flycatcher	20		
Green-crested Flycatcher	C	C	
Alder Flycatcher	C	4	
Least Flycatcher	C	2	1
Prairie Horned Lark	1	2	
Blue Jay	110	C	5
American Crow	C	C	44
Fish Crow			1
Starling			2
Bobolink	C	C	22
Cowbird	C	C	5
Red-winged Blackbird	C	C	48
Meadowlark	C	C	34
Orchard Oriole	2	1	5

	Oberlin, O.	Tiffin, O.	Princeton, N. J.
Baltimore Oriole	C	C	5
Rusty Blackbird	20		17
Purple Grackle			72
Bronzed Grackle	C	C	
Purple Finch	2		21
American Goldfinch	C	C	44
Pine Siskin	100		
Vesper Sparrow	C	C	6
Savanna Sparrow			1
Grasshopper Sparrow	C	C	12
Henslow's Sparrow	3		6
White-crowned Sparrow	C		
White-throated Sparrow	C	1	29
Chipping Sparrow	C	C	28
Field Sparrow	C	C	24
Slate-colored Junco	1		
Song Sparrow	C	C	133
Lincoln's Sparrow	10		
Swamp Sparrow	3	1	19
Towhee	C	C	31
Cardinal	10	C	4
Rose-breasted Grosbeak	C	C	3
Indigo Bunting	C	C	
Dickcissel		2	
Scarlet Tanager	10	C	2
Purple Martin	20	C	
Cliff Swallow	C		
Barn Swallow	C	C	18
Tree Swallow	C		3
Bank Swallow	C	C	3
Rough-winged Swallow	C	C	7
Cedar Waxwing		2	
Migrant Shrike	1	1	
Red-eyed Vireo	C	C	1
Philadelphia Vireo	C		
Warbling Vireo	10	C	
Yellow-throated Vireo	10	2	7
Blue-headed Vireo	C	C	1
White-eyed Vireo			5
Black and White Warbler	C	2	46
Worm-eating Warbler			6
Blue-winged Warbler		C	3
Golden-winged Warbler		4	
Northern Parula Warbler	1	C	16
Nashville Warbler	C	2	
Orange-crowned Warbler	10		
Tennessee Warbler	C	3	
Brewster's Warbler	1		
Yellow Warbler	C	C	52
Black-throated Blue Warbler	C	2	15
Myrtle Warbler	C	C	81
Magnolia Warbler	C	C	2
Cerulean Warbler		2	
Chestnut-sided Warbler	C	C	8
Bay-breasted Warbler	C	6	

	Oberlin, O.	Tiffin, O.	Princeton, N. J.
Black-poll Warbler	1	7	
Blackburnian Warbler	C	C	
Black-throated Green Warbler	C	C	6
Palm Warbler	10	1	
Yellow Palm Warbler	C		2
Prairie Warbler	C		1
Oven-bird	C	2	33
Water-Thrush	2	1	13
Louisiana Water-Thrush	1		
Kentucky Warbler	2		
Mourning Warbler	1	4	
Northern Yellow-throat	C	C	51
Yellow-breasted Chat	6	2	
Hooded Warbler	1		2
Wilson's Warbler	10	3	
Canadian Warbler	C	C	
American Redstart	C	C	17
American Pitpit	C	7	5
Catbird	C	C	62
Brown Thrasher	C	C	9
House Wren	C	C	3
Winter Wren	4		
Long-billed Marsh Wren	C		
Brown Creeper	10		
White-breasted Nuthatch	1	C	4
Red-breasted Nuthatch	20	2	
Tufted Titmouse	3	C	7
Chickadee	2	4	
Carolina Chickadee			3
Golden-crowned Kinglet		2	
Ruby-crowned Kinglet	10	2	2
Blue-gray Gnatcatcher	20	C	
Wood Thrush	C	2	17
Wilson's Thrush	C	C	28
Olive-backed Thrush	C	3	
Gray-cheeked Thrush	C	4	
Hermit Thrush	10	2	
American Robin	C	C	146
Bluebird	C	C	10
Species	144	112	84

As a further contribution to the subject under discussion the appended table of comparisons of four localities is in point. I have selected these localities because the lists submitted seem to me to represent about equally careful work and because they contain a considerable number of species common to each, thus affording opportunity for fair comparisons. Bristol, Conn., and Bloomfield, N. J., may be taken as two supplementary localities, and Youngstown and Oberlin, Ohio, as two others of the same sort for the middle west. It is

probable that a much larger number of localities would show a much more erratic movement of many of the birds even in neighboring localities, for my experience about Oberlin indicated that while the host of a species was late in arrival one might find a few venturesome individuals eking out a miserable subsistence in some particularly favorable spot. Failure to find the spot would result in overlooking the vanguard of the species and thus result in an exceptionally late record. Thus at Oberlin the American Redstart was represented by only seven individuals until May 13, when individuals were found everywhere in the woods. The same condition occurred with each of the warblers recorded in late April and early May. If the arrival of the bulk of a species should be taken as the real arrival of that species then all but the first ten on the subjoined list were two or more weeks late in their arrival at Oberlin.

	Youngst'wn, Ohio.	Oberlin, Ohio.	Bloomfield, N. J.	Bristol, Conn.
American Robin	Feb. 22	Mar. 4	Mar. 16	Mar. 8
Red-winged Blackbird	Mar. 14	Mar. 15	Mar. 24	Mar. 17
Phœbe	Mar. 18	Mar. 18	Mar. 17	Mar. 17
Towhee	Mar. 18	Mar. 18	Apr. 27	Apr. 28
Fox Sparrow	Mar. 18	Mar. 18	Mar. 16	Mar. 17
Hermit Thrush	Mar. 18	Mar. 23	Mar. 23	Apr. 11
Chipping Sparrow	Mar. 23	Mar. 30	Apr. 5	Apr. 21
Vesper Sparrow	Mar. 25	Mar. 22	Apr. 14	Apr. 14
Barn Swallow	Apr. 23	Apr. 22	May 5	Apr. 23
Myrtle Warbler	Apr. 25	Apr. 22	May 10	May 12
Yellow Warbler	Apr. 25	Apr. 29	May 5	May 12
Northern Yellow-throat	Apr. 29	Apr. 29	May 10	May 12
Oven-bird	Apr. 29	Apr. 30	May 15	May 5
Wood Thrush	Apr. 29	Apr. 29	May 6	May 5
Black and White Warbler	Apr. 29	Apr. 29	May 5	Apr. 26
Chimney Swift	Apr. 29	Apr. 29	May 5	May 8
House Wren	Apr. 30	Apr. 29	May 5	May 1
Catbird	Apr. 30	Apr. 29	May 5	May 3
Wilson's Thrush	May 1	Apr. 29	May 25	May 12
American Redstart	May 1	May 1	May 19	May 12
Black-throated Bl. Warb.	May 1	Apr. 29	May 10	May 12
Scarlet Tanager	May 1	May 8	May 27	May 12
Magnolia Warbler	May 6	May 13	May 10	May 16
Least Flycatcher	May 11	May 13	May 5	May 5
Chestnut-sided Warbler	May 11	May 13	May 13	May 12
Red-eyed Vireo	May 12	May 13	May 19	May 14
Canadian Warbler	May 16	May 13	May 26	May 13
Indigo Bunting	May 16	May 13	May 30	May 19
Yellow-throated Vireo	May 16	May 11	May 19	May 9

Of the birds listed above for Oberlin, Ohio, only the Vesper Sparrow

was appreciably earlier than normal, it being more than a week early for the locality. The last eight mentioned species were from a week to two weeks later than the average date of first appearance. While this list includes only a few of the species which make up the Spring movement, it is representative of the species found in each locality and may be taken as indicating the bird movements during the past phenomenal Spring.

BIRDS FROM A CAR WINDOW AGAIN.

BY LYNDS JONES.

In spite of all that has been said and can be said against placing any reliance upon observations from a car window there is a certain value in making as careful records as conditions warrant while one is racing across country in a sleeping-car. No small part of the value to the individual concerned lies in thus lessening the monotony of the journey; as everyone who has attempted this sort of pastime can testify. But there is another value which must not be overlooked, which lies in the comparison of the numbers of individuals of each species which it has been possible to record with certainty. It has been said that any record made from a car window must be taken with a certain degree of mental reservation. I am inclined to challenge that statement and make the contrary assertion that it is entirely possible to be as certain of some birds from a car window as it is from any vantage point. Of course this will be true of a limited number of species whose individual characteristics are very marked, or else they must not be recorded except during the time when the train is standing still and the observer is able to make free use of his field-glasses.

In making the list which follows I have admitted only records which are beyond question in my own mind. This has resulted in the rejection of many records which may have been good but lacked the element of certainty. The list represents much less than half of all of the species actually recorded. Only those are given which seem to be of interest from the standpoint of comparisons. In this list no account is taken

of subspecific differences because I wish to compare species with species. The numbers refer to the number of individuals actually counted.

The route traveled was from Oberlin, Ohio, over the Lake Shore and Michigan Southern Railway; from Chicago over the Northwestern and its connecting lines to Portland, Oregon, taking the Oregon Short Line at Granger, thus avoiding Ogden. The journey began on May 28th, and ended at Portland on June 1st. The working time covered the following areas: Oberlin, Ohio, to Elkhart, Indiana; Mount Vernon, Iowa, to Fremont, Nebraska; Sutherland, Nebraska, to Rawlins, Wyoming; Montpelier, Idaho, to Huntington, Oregon; Heppner Junction to Portland, Oregon. It will be apparent that the dates indicate that the journey was made while most of the birds were nesting.

The list which follows is given in the order of the number of individuals recorded for each species:

Mourning Dove	1759	Yellow Warbler	23
Red-winged Blackbird	554	Northern Flicker	20
Brewer's Blackbird	234	Killdeer	18
Meadowlark	212	Belted Kingfisher	17
Bronzed Grackle	186	Burrowing Owl	16
Crow	153	Sparrow Hawk	15
Lark Bunting	149	Bobolink	15
Barn Swallow	106	Spotted Sandpiper	12
Black-billed Magpie	71	Bank Swallow	11
Kingbird	63	Great Blue Heron	9
Red-headed Woodpecker	60	Yellow-headed Blackbird	7
Chimney Swift	59	Indigo Bunting	7
Robin	49	Blue Jay	6
Otocoris	37	Lark Sparrow	6
Lanius	34	Marsh Hawk	5
Goldfinch	31	Vesper Sparrow	3
Arkansas Kingbird	34	Turkey Vulture	2
Dickcissel	28	Purple Martin	2
Cliff Swallow	23		

Mourning Doves were not only the most numerous in individuals but were the most evenly distributed of the species recorded. The numbers seen during each day increased perceptibly as we sped westward, reaching the maximum in Idaho and eastern Oregon—in the desert regions. The preponderance of individuals may be partly accounted for by the size of the bird and the ease with which it may be identified,

but its habit of frequenting the railway right of way as a feeding ground is undoubtedly an important factor in determining its abundance. This habit is accentuated in the sage-brush regions where food must be relatively scarce.

Of the 554 Red-winged Blackbirds recorded 412 were seen in western Iowa, and only 113 were recorded over the area occupied by the Brewer Blackbird, so that it must be considered about half as numerous as Brewer's in the same region. Both of these blackbirds were unquestionably far more numerous than the record shows because positive identifications could be made only under the most favorable circumstances.

Meadowlarks were remarkably evenly distributed. There were more westerly than easterly. Possibly this may be partly accounted for by a habit of feeding along the railway right of way in the west.

Eliminating the 109 Crows recorded in western Iowa, the species was evenly distributed over the area covered.

No Bronzed Grackles were seen west of Fremont, Nebraska. The exact place where the last were recorded does not appear on my records.

Lark Buntings were seen only on a run from Sutherland, Nebraska, to Pine Bluff, Wyoming, except a single individual on the following day, in Idaho.

Barn Swallows were unaccountably scarce, except in western Iowa, where 75 were recorded. None were seen in western Oregon, but elsewhere an occasional one was seen hawking over meadows.

Black-billed Magpies were seen only in Idaho and Oregon —none in western Oregon. They were mostly well scattered, one or two appearing in a place, six being the largest number seen together.

Half of the Kingbirds were seen in western Iowa. Elsewhere they were occasional, often two together.

Red-headed Woodpeckers were not seen west of Pine Bluff, Wyoming. All recorded were on the railway right of way.

All but two of the Chimney Swifts were seen in western

Iowa, and one of those two not far from Omaha, Nebraska; the other one was an Ohio bird.

Robins were occasional over the whole course except from Sutherland, Nebraska, to Rawlins, Wyoming.

Representatives of the genus Otocoris which could be certainly identified as such were scarce except in western Nebraska, where 30 were seen. They seemed to be busy with nesting duties.

Except from Omaha to Fremont, Nebraska, Shrikes were occasional, the largest number being recorded in eastern Oregon, where 21 were counted either on or near the right of way.

Goldfinches were scattering and erratic, and mostly recorded in small villages or at watering places.

The Arkansas Kingbirds were seen only in western Nebraska, Wyoming, Idaho, and eastern Oregon—two days' run. Here they were much the most numerous flycatcher.

There were no Dickcissels west of Fremont, Nebraska, and but one recorded for western Iowa. Rain in Iowa dampened their ardor.

Sparrow Hawks, which I have come to regard as one of the characteristic birds of such a trip, were distressingly few in number. The records for the different regions are as follows: Two, two, two, six, three. Perhaps they were molting.

No Bobolinks were seen west of Iowa. On the homeward journey there were not a few seen in Montana along the course of the Northern Pacific.

Burrowing Owls were seen only between Montpelier, Idaho, and Huntington, Oregon. Conditions seemed to be favorable elsewhere.

The journey left the impression with me of a paucity of bird life not before experienced on a journey of such extent. Except for about three hours, while we were running through western Iowa, the weather conditions were favorable for the usual activities of the birds. The slowness of the train in many interesting parts of the country, and my own freedom from neighboring elbows—there were few in the car—made

the circumstances for such a study as favorable as possible. It was several times remarked that the engines seemed to be in such delicate health that only the pure water—that contained in tanks far removed from towns and cities—would suit! If the steam could be shut off when the train stops the bird-man would be happy.

A PRELIMINARY LIST OF THE BIRDS OF WESTERN LYMAN COUNTY, SOUTH DAKOTA.

BY ADRIAN LARSON.

The following list is compiled from observations made along the White Clay Creek valley in western Lyman county, S. D., from Sept. 12, 1906, to April 25, 1907.

Lyman county lies in the Great Plains Region at an elevation of about 2,000 feet. Its topography is similar to other regions in the Great Plains country, being mostly level tion of about 2,000 feet. Its topography is similar to other regions in the Great Plains county, being mostly level prairie, with occasional hills or buttes rising above the prairie.

There are numerous dry creeks, which run only in the spring or after very heavy rains; they are mostly dry at other times.

The hills and prairies are, for the greater part, covered with range grass, while the creeks are fringed with such trees as ash, box-elder, cottonwood, elm, willow, and rarely a red cedar, with much buffalo-berry, hazel, and plum brush.

There are numerous marshes on the prairies which are well filled with water in the spring, but dry up towards summer:

1. *Larus-species?* A flock of eleven seen April 24. They may have been the Franklin Gull.
2. *Anas boschas.*—Mallard. Common migrant.
3. *Nettion carolinensis.*—Green-winged Teal. Common migrant.
4. *Querquedula discors.*—Blue-winged Teal. Common migrant.
5. *Spatula clypeata.*—Shoveller. Common migrant.
6. *Dafila acuta.*—Pintail. Common migrant.

7. *Chen hyperborea.*—Lesser Snow Goose. Migrant.

8. *Branta canadensis.*—Canada Goose. Migrant.

9. *Botaurus lentiginosus.*—American Bittern. One seen Sept. 20.

10. *Grus mexicana.*—Whooping Crane. Common migrant, Sept. 26-Oct. 4; April 13.

11. *Porzana carolina.*—Sora. One seen Sept. 16.

12. *Gallinago delicata.*—Wilson Snipe. Migrant, Sept. 26- Oct. 4.

13. *Bartramia longicauda.*—Bartramian Sandpiper. One seen Sept. 13.

14. *Oxyechus vociferus.*—Killdeer. Summer resident. Arrival, March 21.

15. *Pediœcetes phasianellus campestris.*—Prairie Sharp-tailed Grouse. Common resident. I have observed these Grouse eating the seeds of the Wild Sunflower many times; they also eat Buffalo-berries and Hazel-berries.

16. *Zenaidura macroura.*—Mourning Dove. Common summer resident.

17. *Circus hudsonius.*—Marsh Hawk. Common summer resident. Departure, Nov. 13; arrival, March 15.

18. *Accipiter atricapillus.*—American Goshawk. Winter visitant.

19. *Archibuteo lagopus sancti-johannis.*—American Rough-legged Hawk. Winter visitant. Common for the species.

20. *Falco columbarius.*—Pigeon Hawk. Winter visitant. One day last winter I saw a Pigeon Hawk chasing a sharp-tailed Grouse, but the Grouse dove under cover and then the Hawk left it.

21. *Falco sparverius.*—American Sparrow Hawk. Common summer resident. Arrival, March 23.

22. *Asio wilsonianus.*—Long-eared Owl. Resident; common.

23. *Asio accipitrinus.*—Short-eared Owl. One seen Dec. 23; four seen Jan. 6.

24. *Megascops asio.*—Screech Owl. Resident; not common.

25. *Bubo virginianus pallescens.*—Western Horned Owl. One seen Dec. 11.

26. *Spcotyto cunicularia hypogæa.*—Burrowing Owl. Common in Prairie Dog towns.

27. *Dryobates villosus.*—Hairy Woodpecker. Resident; common.

28. *Dryobates pubescens medianus.*—Downy Woodpecker. Resident; common.

29. *Melanerpes erythrocephalus.*—Red-headed Woodpecker. Summer resident; common. Departure, Sept. 18.

30. *Colaptes auratus luteus.*—Northern Flicker. Summer resident; common.

31. *Colaptes cafer collaris.*—Red-shafted Flicker. Summer resident; common. The first Flickers were seen on March 24.

32. *Otocoris alpestris leucolæma.*—Desert Horned Lark. Summer resident; tolerably common.

33. *Otocoris alpestris hoyti.*—Winter visitant; common.

34. *Pica pica hudsonia.*—Black-billed Magpie. Common resident.

35. *Cyanocitta cristata.*—Blue Jay. One or two seen Sept. 18.

36. *Corvus brachyrhynchos.*—American Crow. Summer resident; common. Departure, Oct. 19; arrival, March 10.

37. *Agelaius phœniceus.*—Red-winged Blackbird. Summer resident. Arrival, March 27.

38. *Sturnella magna neglecta.*—Western Meadowlark. Summer resident; tolerably common. Departure, Oct. 25; arrival, March 15.

39. *Scolecophagus carolinus.*—Rusty Blackbird. Common migrant.

40. *Acanthis linaria.*—Redpoll. Common winter visitant. Departure, March 19. I often saw these birds feeding on the seeds of the tumbleweed.

41. *Astragalinus tristis.*—American Goldfinch. Common summer resident.

42. *Passer domesticus.*—House Sparrow. Tolerably common.

43. *Passerina nivalis.*—Snow Bunting. Common winter visitant.

44. *Calcarius lapponicus.*—Lapland Longspur. Common winter visitant.

45. *Rhynchophanes mccownii.*—McCown Longspur. A large flock seen April 7.

46. *Spizella monticola ochracea.*—Western Tree Sparrow. Common migrant, Oct. 1-Nov. 14; Feb. 18. Still common on the 25th of April.

47. *Junco hyemalis.*—Slate-colored Junco.—Migrant Oct. 1, Oct. 22, March 26. Still common on the 25th of April.

48. *Melospiza cinera melodia.*—Song Sparrow. Summer resident. Arrival, March 31.

49. *Pipilo maculatus arcticus.*—Arctic Towhee. Summer resident; common.

50. *Ampelis garrulus.*—Bohemian Waxwing. A flock of ten seen Jan. 4.

51. *Lanius borealis.*—Northern Shrike. Common winter visitant.

52. *Lanius ludovicianus excubitorides.*—White-rumped Shrike. Common summer resident.

53. *Toxostoma rufum.*—Brown Thrasher. Summer resident. Departure, Sept. 18.

54. *Penthestes atricapillus.*—Chickadee. Common resident.

55. *Regulus calendula.*—Ruby-crowned Kinglet. Migrant.

56. *Certhia familiaris americana.*—Brown Creeper.

57. *Merula migratoria.*—American Robin. Only one seen in the fall; common in the spring. Arrival, March 24.

Although this list is rather short, it will give a fair idea of what birds would be found here.

THE WILSON BULLETIN

A Quarterly Magazine Devoted to the Study of Living Birds.
Official Organ of the Wilson Ornithological Club.

Edited by LYNDS JONES.

PUBLISHED BY THE CLUB, AT OBERLIN, OHIO.

Price in the United States, Canada and Mexico, 50 cents a year, 15 cents a number, postpaid. Price in all countries in the International Postal Union, 65 cents a year, 20 cents a number. Subscriptions may be sent to Lynds Jones, Oberlin, Ohio, or to Mr. Frank L. Burns, Berwyn, Penn.

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EDITORIAL.

The editor's absence from Oberlin during the summer and early autumn is responsible for the great delay in the appearance of this number of the BULLETIN. This delay was foreseen and announced in May. It is anticipated that if there are any further delays they will be slight.

Promptness in the appearance of the BULLETIN largely depends upon contributors. It is important that copy intended for any issue should reach the editor not later than the 25th of the month preceding the issue. Copy for the December number should reach the editor's desk by November 25. Will you not attend to this matter at once and help to make the December number better than any which has yet been issued?

The article entitled "Birds from a Car Window Again" in this number is intended as the first of a series relating to the editor's studies on the Washington coast. Succeeding articles will be illustrated. The object of these articles will be to acquaint the reader with the cardinal features of certain restricted areas or islands which are representative, and give as much of the life histories of characteristic birds as the short period of study warrants.

In former numbers of the BULLETIN the editor has urged the importance of studies of juvenile plumages of even the commonest of our birds. Not only is there a great deal of the past history of the species wrapped up in the color patterns of the young birds, even looking back to their ancestry, but there is abundant material here for throwing light upon evolutionary processes. It is doubtless true that most of us are not now interested in making deductions from our bird studies, being content with the pleasure it affords as a pastime, but it cannot long remain merely a pleasurable means of spending idle moments without awakening desires to know the meaning of it all. In preparation for that time be acquainting yourself with as many phases of bird life as possible. Become a *trained* ornithologist. Be accurate in all your work.

It would be impossible to predict anything concerning the coming winter, but after such a phenomenal spring it would not be at all surprising if we should find some unusual things among the birds. The writer has probably not been in a position to note the fall migrations in their bearing upon the spring movement northward, but it has seemed that birds have been less common than during previous southward movements. The lateness of their arrival upon their breeding grounds may have resulted in fewer young being brought to maturity than under normal conditions. As a single example, the Alder Flycatcher has been a common breeding bird along the borders of the Sandusky Bay marshes, particularly in the shrubbery bordering the swamp margin of the sand spit. The past summer I looked in vain for any at all, and found very few at any place along the lake shore where many usually breed. This scarcity may have resulted from other causes than the late spring. At any rate the winter birds will certainly be worth careful study. A large number of winter lists accompanied by notes would make interesting reading for the March BULLETIN.

ELECTION OF OFFICERS FOR THE YEAR 1908.

Notices for nominations should have been sent out in September, but the President's absence made that impracticable. Nominations for all officers except Vice-President should be made at once and sent to Lynds Jones, Oberlin, Ohio. If this is tatended to at once ballots can be distributed in time for the election at the regular time, Dec. 5.

In this connection the present incumbent wishes to say that it will not be possible for him to attend to the duties of the President's office during the coming year, and that he is therefore not a candidate for renomination.

FIELD NOTES.

SOME RECORDS FOR THE CEDAR POINT SAND SPIT, OHIO.—Beginning early in October, 1906, it has been my privilege to give one day of nearly every week of the migration seasons and the winter months to ecological bird studies along the seven miles of this narrow neck of sand. A report of this work was given in the December, 1906, Bulletin, page 126. Further notes are given here relating to the winter and spring months.

Tree Sparrow. A considerable number were present April 29, the last date on which the species was recorded. The latest previous record was April 16, 1898.

Slate-colored Junco. Two were found May 20. The latest previous record was May 4, 1903.

Red-breasted Merganser. A group consisting of one male and six females was recorded for May 13. The latest previous record was May 7, 1904.

Canada Goose. Present in uncountable numbers on April 15, which was the last record. This is usually an uncommon species in this part of northern Ohio. The latest previous record was March 26, 1896.

Baldpate. The first birds of this species recorded were found in the marshes on March 18, and it was the commonest duck on all trips to an including May 6. The last was a company of seven on May 20. The latest previous records are April 25, 1898 and 1901.

Pintail. It was common during the last half of March. The last, a company of four, was recorded on April 29. The latest previous record is April 6, 1903.

Shoveller. Present in small numbers from March 18 to 30.

Saw-whet Owl. One found in the shrubbery near the west end of the sand spit March 30. Any occurrence of this owl is worthy of record.

Blue Goose. Two flocks were seen on April 8, and a single individual on April 15.

Henslow's Sparrow. The appearance of this rare and local sparrow in a field at the east end of the sand spit, where it was breeding, is worthy of notice. On April 29 at least six individuals were found.

Worm-eating Warbler. One found near the east end of the sand spit. This is the first authentic record for this part of the state.

Philadelphia Vireo. First recorded April 29, common on May 13 and 20. Not recorded for this part of the state prior to 1906.

Olive-sided Flycatcher. Common on May 13. This is the first record for this part of Ohio.

Yellow-bellied Flycatcher. Individuals counted up to 20 when the count was lost. Probably more than double that number. Hitherto it has been of only casual occurrence in northern Ohio.

Kentucky Warbler. Two found at the east end of the sand spit May 13. Always scarce.

Brewster's Warbler. One found near the Lake Laboratory. It was in nearly typical plumage for this form.

Caspian Tern. Two were ranging along the sand spit and over the bay September 13 and 23, 1907. They passed within easy range several times. LYNDS JONES.

A PURPLE MARTIN ROOST.—On my coming from Ohio to Florida, I was impressed with the much greater abundance of Purple Martins in the South than in the North. During the months of July and August, 1907, I traveled over about all of west Florida, and was in nearly all of the towns and cities west of the Suwannee river. In all this territory I saw the Purple Martins nowhere nearly so abundant as at Quincy, Gadsden county, Florida. There were very few to be seen here during the middle of the day, but towards evening they would gather in.

It was impossible to tell where they came from, but in a very short time, and just before sunset, there would be thousands of them in the air circling over the town. The sky was alive with them until about dusk, when they went to roost. The noise of their chatter was continuous during this time.

They gradually collected in a more compact body and swung around over the town in large gyrations, until finally a little before dark, as if of one mind, they dropped into a small clump of mulberry trees. With great noise of wing as well as of voice, they fairly fell into these trees with a rush that was truly astonishing. These trees are in the central part of the town, near the Lorraine hotel. They had all settled in less time than it takes to write it. I believe that it would be conservative to estimate their number at more than five thousand. After getting settled, their noise was intense; from a little distance it sounded much like escaping steam, or like the patter of violent rain on the leaves of the trees. This noise continued intermittently until late into the night, and began again with energy before daylight in the morning.

The birds began to leave just about dawn,—a few straggling little bunches leading off, and then practically all of the rest taking wing at once and swinging off in one grand departure. However, there were a few that did not get started with the main flight; but in a very few minutes they were all gone. The branches of the trees sprang up very perceptibly as their load was released.

My observations extended over only four days.—August 6-9, 1907,—and I have been informed that the Martins have been roosting in this clump of trees every night during the entire summer for a number of years. G. C. FISHER.

NOTES FROM A COLUMBUS TAXIDERMIST.—I can report an unusual abundance of Wood Duck this fall. I have mounted eight or ten during the past two weeks, and know of as many more that have been killed. In the years 1900 to 1905 I did not see a Wood Duck and came to regard them as nearly extinct. Indeed many new sportsmen did not know what a Wood Duck is like, and some have come to me with Mergansers saying that they had Wood Ducks. I mention this to show that the bird was almost unknown for a time. In the fall of 1905 these Ducks began to come in for mounting and have been growing more common ever since. Some one with more bird-lore than myself must account for the increase. Certainly every one will be glad of it.

In the spring I had a Black-bellied Plover to mount which I regard as rare. I also knew of two Little Blue Herons being taken at Buckeye Lake. They were preserved by a friend who still has them. I mounted a Double-crested Cormorant for Prof. Mercer of Athens, which was presumably taken at Buckeye Lake.

THOMAS M. EARL.

BEWICK'S WREN (*Thryomanes bewickii*) IN SENECA COUNTY, OHIO.—On April 3rd, while waiting for a street car in the west end of town I twice heard the song of Bewick's Wren and also saw the bird once. As I have been familiar with the bird for fifteen years in Missouri, Virginia and Southern Ohio, I was greatly surprised to run across this species up in this part of the state, and I regard its occurrence here as purely accidental. This record, together with the Henslow's Sparrow of last fall and the Black-crowned Night Heron of May 14, 1907, brings the number of species for this county up to 208. W. F. HENNINGER.

Looking oceanward from the beach near the Indian burial ground, La Push, at high tide. Typical verdure crowned rocks a mile off shore.

THE
WILSON BULLETIN

NO. 61.

A QUARTERLY JOURNAL OF ORNITHOLOGY

VOL. XIX. DECEMBER, 1907. NO. 4

JUNE WITH THE BIRDS OF THE WASHINGTON COAST.

Around Cape Flattery.

LYNDS JONES.

June 3rd, 1907, was only a few minutes old when the expedition of which I shall speak in this and subsequent numbers of the Bulletin, began with the casting off from the wharf at Seattle. We were asleep, but that did not seem to hinder the departure of the boat.

Our party consisted of Rev. W. L. Dawson, two women who were in quest of information from the Indians and material for short stories, the writer, and an amount of baggage sufficient for an expedition to the South Pole. Since the expedition was to be one in which the camera must play the most prominent part, cameras and appropriate materials for this work bulked large and weighed heavy. Former experience with films had proved their unreliability for the finest work, so plates, heavy and fragile as they are, were taken by the gross. We would do the same thing again.

Morning found us steaming outward near the west shore of Admiralty Inlet. Birds were scarce on and over the water until we approached Port Townsend, on the division line between the Inlet and the Strait of Juan de Fuca. Here birds

were everywhere, flying in all directions away from the approaching steamer. Perhaps the most numerous were the little Marbled Murrelets, reminding one of flying fish as they started up from the water on rapidly beating wings and skimmed the surface to drop upon the surface or dive when out of harm's way. Pigeon Guillemots were also numerous. A few California Murres, Tufted Puffins, Loons, Harlequin Ducks, and Holbœll's Grebes were seen on the water, and flying about were Glaucus-winged and Western Gulls, Baird's Cormorants, and Northwest Coast Herons. It was interesting to watch the Northwest Crows feeding with and much in the same manner as the Gulls. Of course they did not rest upon the water nor snatch morsels of food from the water while flying, but they perched upon the floating drift-wood and gleaned from this and from the water, often standing beside the Gulls.

At Port Angeles the unloading of a monument to some departed Greatness consumed nearly half of the day and enabled us to make a brief exploration of that immediate region. Here were recorded Tree, Barn, Bank, Rough-winged and Violet Green Swallows; Yellow, Lutescent, and Pileolated Warblers; Nuttall's, and Western Chipping Sparrows; Shufeldt's Junco, Western Warbling Vireo, Western Flycatcher, Russet-backed Thrush, Western Martin, Rufous Hummingbird, and California Purple Finch; besides the water birds mentioned above. If the study had been pursued in the early morning instead of in the middle of the day there is little doubt that a larger list of species would have been secured. Most of the birds listed were in full song and some were evidently nesting.

All day long the scenery was obscured and often entirely hidden in the dense smoke of the forest fires. Occasional glimpses of the far snow-capped Olympics and the green verdure-clad nearer foot-hills fanned almost into flame again the longing to conquer this vast wilderness and mount its loftiest heights. Vancouver lay a dim haze along the northern shore.

Neah Bay is a Makah Indian village of some 500 inhabitants. It is at the head of the Strait navigation, situated upon a well protected but shallow bay, just inside the mouth of the Strait. There is a trading-post store here, but one should not depend upon securing many supplies for an outfitting here.

Store house at Neah Bay in the distance. Bows of Indian canoes in the foreground. The overhanging bow is carved to roughly resemble a deer's head.

The steamer tied up to the float about half-way between Widdah Island and the shore at half-past two Tuesday morning, nearly twenty-seven hours out from Seattle. Its immediate return made disembarkation necessary, but since daylight begins in this high latitude at this time of year about three o'clock the wait in the chill night air was short.

Our two Indian guides had reached the town of Neah Bay only the night before, after a tramp over the mountains consuming two days, and we saw nothing of them until the day was well advanced. A prolonged parley over the time, extent, and cost of the trip was followed by a further delay in securing the necessary equipment for the canoe, so that it was mid-afternoon before the last of the baggage was stowed away in the eighteen-foot cedar canoe and the four passengers had bored their way down to cramped seats upon the bottom. In the rough waters at the entrance of the Strait the importance of the high sides of the canoe became apparent and the skill of the Indians in avoiding breaking wave crests impressed us with calm confidence in the outcome of the trip as far as this sort of navigation had any bearing upon it.

Tatoosh Island guards the American side of the mouth of the Strait of Juan de Fuca, and is one of the vastly numerous rocks which lie out in the Pacific marking the line of an ancient coast. Its precipitous sides preclude landing except on the narrow pebbly beach which lies between an outlying rock which is connected to it at low tide, and the main island. This beach faces the Strait and is fairly well protected by other outlying rocks. Here we landed about five in the afternoon for the first camp. The light-house and wireless station are responsible for the white inhabitants of this extensive rock, and three or four ancient Indian houses furnish a permanent residence for about a dozen Indians, and a temporary residence for many more during the fishing season. In the accompanying half-tone the Indian houses are dimly shown to the left of the government store house.

Naturally the bird population of this twenty-acre rock is not very extensive. The light keepers told us wonderful

stories of the vast numbers of birds which pass during the vernal migrations, and of strange night cries which we later learned to be those of Cassin's Auklet. During the remainder of the day and until nine o'clock the next we found twelve Black Oyster-catchers, many Baird's Cormorants making nests among the rocks below our reach, four pairs of Rusty Song Sparrows, four Black Swifts flying about over the island, five or more pairs of Barn Swallows nesting in the grottoes of the rocks and in caves, three Rough-winged Swallows, a single Sooty Fox Sparrow in full song, a single Northwest Crow, six Harlequin Ducks swimming about and feeding on the ocean side in places protected by the outlying rocks from the violence of the waves, numerous Glaucus-winged Gulls and Pigeon Guillemots, and a single Western Gull, all flying about. During the night we heard the weird call of Kæding's Petrel. Doubtless the Glaucus-winged Gulls nest somewhere about this island, but we were unable to find nests. A dense fog which amounted to rain a part of the time prevented much work on the parts of the island where the vegetation was more than knee-high and made the quest for burrows of the Petrel and Auklet in the turf fruitless.

Not until nine o'clock had the fog lifted sufficiently to make it safe to venture out upon the water. Once afloat and well away from this inhabited island birds became numerous in individuals though few in species. A flock of Northern Phalaropes, thirty or more individuals, swept past on their way northward. Wherever rocks were approached there two or more Black Oyster-catchers were standing guard and protesting our further advance. Glaucus-winged Gulls, Pigeon Guillemots, Baird's Cormorants, and Tufted Puffins were everywhere flying about or resting on the ocean. Loons and Herons were occasionally seen.

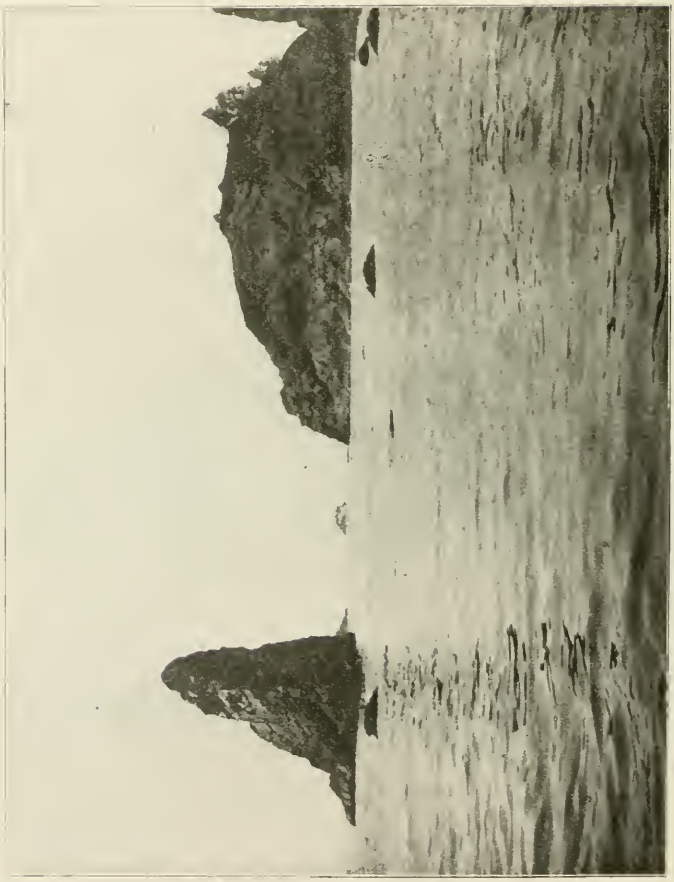
Some faint suggestion of the appearance of this bold coast can be conveyed by photographs, but one must navigate the waters in which they lie seated in the bottom of an Indian canoe to appreciate their magnificence, their ruggedness, and their numbers. Rocks which are uncovered only in the trough

Tatoosh Island, with its powerful light, guards the entrance to the Strait. As an added safeguard to the many ships entering these inland waters a fully equipped wireless station has recently been established here, presaging the general use of the wireless system on this coast. A month's residence here during the height of the migration should be an interesting and valuable experience.

Our first camp on the beach at Tatoosh Island. Fog and smoke from the Indians' fires dim the rocks in the center. The tents at the right of the white beach storehouse, the Indian houses at the left.

of the waves at low tide, showing black amid the churned water; rocks rising a few feet above the ocean surface completely washed by every wave; rocks with broad, waterworn shoulders in the center of which a narrow pinnacle rises twenty or more feet almost sheer skyward; rocks rising sheer from the waters and overhanging, narrowing toward the summit or with nearly parallel sides to the verdure-clad crest 200 feet from the water. The accompanying half-tones of a few which it was possible to photograph between fog banks, or partly wrapped within the fog, give but a sorry suggestion of what we were looking upon during nearly the entire day, June 5th, as our Indians rowed and paddled from the vantage point of Tatoosh Island to our Sandy Point Camp, about half the distance to LaPush.

The weather experts on Tatoosh Island had promised us fair weather for at least two days, but predicted that the presence of an extensive area of high pressure would cause long and high rolling swells. They shrugged their shoulders when we proposed launching forth in the 18-foot canoe with more than a ton of baggage. Their prediction was verified in every particular. Only the Indians and the writer felt the gnawings of hunger during the eight hours on the water. Very little water was shipped during the voyage, in fact rather less in quantity than the involuntary response to the call of the sea! Just inside the line of rocks which form the limits of the broad bay-like area bordering the beach at Sandy Point huge kelps fairly crowd each other and effectually bar the encroachment of any rough water. Once inside the line of kelps the water becomes glassy smooth with only long flat swells which die away almost immediately. The canoe wound its way along moderately clear channels in the kelp forests, avoiding scarcely submerged rocks, and poked its nose into a gently sloping sandy beach. Just beyond the storm wave line the beach presented the typical appearance of the region with its abundant supply of drift ranging all the way from splinters of wood to logs many feet in diameter. Bird voices



Some of the rocks at the Point of Arches.

The beauty of these outlying rocks is soul-stirring. One never sees them twice the same because the scene at each slight angle changes completely.

Fog obscured rocks. The partly obscured rock at the left is Fuca's Pillar.

This well illustrates the characteristic scene when the fog is only moderate, or erratic. The air can be clear and it can rival or surpass Cape Cod, or even London itself.

all about made preparations for the night irksome in the extreme.

Early morning revealed a wholly unexpected condition of the bay which we had entered. Instead of a level surface of glassy water we looked out upon a boulder strewn area acres in extent with only shallow pools of water here and there. Seaweed clung to the larger rocks or grew in masses on the sand, and crabs scurried to cover beneath rocks or within the masses of seaweed. Crows were reaping a rich harvest of the sea animals which were foolish enough to remain exposed. Clearly it would be some hours before the completely ebbed tide would flow again enough to float the heavily loaded canoe over the rock summits. The delay was vexatious for some reasons but not altogether unwelcome since it afforded time to become familiar with the land birds of the region.

The Sandy Point list is small but fairly represents the common birds of a narrow belt fringing this coast. Rusty Song, Sooty Fox, and Nuttall's Sparrows were in full song and evidently nesting; Lutescent and Golden Pileolated Warblers were seen and heard many times; Western Winter Wren, Northwest Flicker, Rufous Hummingbird, Oregon Towhee, Russet-backed Thrush, California Purple Finch, and the Northwest Coast Heron constituted the list of land birds, adding the Crow before mentioned. The usual water birds were flying about.

At this camp the Crows were so fearless that it became necessary to watch our stock of provisions. No sooner was the waste food thrown out than there was a scramble of the Crows for it. Their numbers seemed to be unlimited. The ordinary call sounded like a cross between the call of our familiar eastern Crow and that of the Fish Crow of the Atlantic coast region. In habits these Crows more closely resemble the Fish Crow.

The water which Harry Hobucket, the younger Indian, brought to camp for cooking purposes deserves passing mention. In color it closely resembled strong coffee, but in flavor it was somewhere between a lumber yard and a slaughter

house. When thoroughly cooked and thinned out with rice or grapenut it proved very palatable! An Indian's perceptions of a white man's gustatory sensibilities are minus infinity.

Once afloat upon as calm a sea as one could hope for even on the famed Pacific, our way lay among rocks and islets alive with birds. It was hard to pass them by when so many superb pictures were floating about. The good days coming when a portable camera will be able to catch the pictures as the eyes see them—are they near at hand? Now we must be content with scarcely more than suggestions of the most that we see.

Our course lay to the Indian village of La Push, near the mouth of the Quillyute river, past Carroll Islet where the best part of our work was to be done. The story of this "Bird Paradise" will be told later.

THE BIRDS OF POINT PELEE.

BY P. A. TAVERNER AND B. H. SWALES.

(Continued from page 99.)

85. **Coccyzus americanus*.—Yellow-billed Cuckoo.

A common and well distributed species in all wooded sections of the Point. Noted May 13, 1905, to September 10, 1905. Likely later birds have been overlooked, as in the adjoining Michigan territory they remain in limited numbers until the end of the first week of October. During the first three days of September, 1906, both species were unusually abundant, but when we made our second visit from September 15 to the 22d, their numbers were much diminished, and none of this species were noted, and but few of the next. From May 30 to June 1, 1907, cuckoos were remarkably scarce, and the only indication of their presence on the Point was furnished by a small pile of feathers of one of this species that marked the place where one had been eaten by a hawk. During the first few days of the Sharp-shin flights of 1905-6 the cuckoos suffered severely under their depredations and, until the arrival of the Olive-backed and Gray-cheeked Thrushes, seemed to be the staple of their food supply.

86. **Coccyzus erythrophthalmus*.—Black-billed Cuckoo.

As far as we have been able to judge without carefully looking up every cuckoo noted, the two species are about equally divided in numbers on the Point. If anything the Black-bill is slightly in the minority. We have positively identified none later than September 14, 1905.

87. *Ceryle alcyon.*—Belted Kingfisher.

Fairly common. Very seldom seen over the lake, but we have scarcely ever visited the ponds without seeing one or more. We have met with no indications of their breeding on the Point, but the banks of the dykes near the base offer a congenial-looking habitat.

88. *Dryobates villosus.*—Hairy Woodpecker.

Woodpeckers, as a class, are scarce on the Point; and this particular species is rare. Why this should be so we are unable to surmise. There is plenty of heavy woodland, with a normal amount of dead and dying timber scattered through it, and the comparative absence of this usually common species is one of the interesting phenomena of the locality. Keays noted one September 19, 1901, and we observed one single bird March 9, 1907. It is likely that they would be found more commonly during the winter months.

89. *Dryobates pubescens medianus.*—Northern Downy Woodpecker.

With the exception of the Flicker the Downy is the commonest woodpecker on the Point. It was rare during September, 1905, but at all other times we have noted from one to ten individuals each day.

90. **Sphyrapicus varius.*—Yellow-bellied Sapsucker.

We have generally missed the height of the migrations of this species at the Point, which occur earlier in the spring and later in the fall than the dates of the majority of our visits. We noted a few May 13-14, 1905, and one the first of the following September. Keays reports it as increasing from two on the 18th to one hundred on the 21st of September, 1901. We saw none during the August-September visit of 1907, but October 14, 1906, we noted eight or ten individuals.

EXTINCT.

Ceophlœus pileatus abieticola.—Northern Pileated Woodpecker.

An old resident, a man of about seventy years of age, informed us that in his boyhood the "Cock of the Woods" was not uncommon, but he had not seen any for a good many years. None of the present shooters remember ever seeing one, so it is likely that the species has been extinct on the Point for something in the neighborhood of thirty years.

91. **Melanerpes erythrocephalus.*—Red-headed Woodpecker.

We have found the Red-headed Woodpecker common on all May trips, but scarce at other times on the Point, though coincidently it was often common on the adjoining mainland. In September of 1905, we saw but one bird, on the 6th. During the same month of the two succeeding years they were more numerous and we saw one or more several times during each visit. Our latest date is October 14, 1906, when one was observed. None were seen in March, 1907.

92. **Colaptes auratus luteus.*—Northern Flicker.

Not common during our May dates. Those seen then likely represent the breeding population. One seen March 9, 1907. During September it has always been one of the most abundant birds of the Point. Keays reports a flight in 1901 when he noted four hundred September 21.

The Sharp-shin flights discommoded this species less than any other species of small birds. The Flickers never resorted to concealment of any kind as other birds did, but frequented the most conspicuous places in the dead trees, from whence they shrieked their loudest, as is their wont. Though at times they seemed uneasy and restless, they were perfectly able to take care of themselves and easily made their escape when attacked. On the other hand the hawks seemed aware of the futility of successful pursuit, and after a few half-hearted dashes usually desisted. The usual course of proceedure of the Flicker, when attacked by a hawk, was to wait until the last minute, when the hawk, in its swoop, was just about to seize its victim, and then dodge quickly to the other side of the limb. In every case observed the ruse worked perfectly, and we found only once the feather remains which proved that once in a while the hawk was a little too quick for the Flicker.

93. **Antrostomus carolinensis.*—Chuck-wills-widow.

The capture of this bird, May 21, 1906, by Fleming, in the red cedar thickets near the end of the Point, forms one of the most interesting records for Pelee and one that is unique in Great Lakes Ornithology. The bird was flushed from near the roadside at the feet of Fleming and Swales, and lit again in full view of them both and calmly waited for them to warn Taverner out of the line of fire and then collect it in due form. The bird was a male and forms the first Canadian record of the species. See Auk, XXIII, 1906, 343.

94. **Antrostomus vociferus.*—Whip-poor-will.

A common bird. We have always heard one or more during the May nights, while in camp in the red cedar thickets, when they would repeat their plaintive refrain until early in the morning. In our various September visits we have usually found them more or less common, but at that season they are much quieter, and seldom do more than call a few times in the early evening and then cease. Sometimes one will be heard again through the night, but more often not. September, 1905, beginning the 4th, we saw from one to six until the 13th, when a great flight of them appeared on the Point. That day, in the red cedar thickets near the extremity of the Point, we flushed thirty between twelve and half-past one in the afternoon. They all left that night, as the next day, on the same ground, we were able to put up but three.

One evening, just as the dusk was darkening into night, a Whip-poor-will was heard near the camp. We stole out, and the bird was located in a large bare walnut tree in the open bush where, looking up against the still faintly illuminated sky, it could be plainly made out, sitting lengthwise, as is their fashion, on a rather large and almost horizontal branch. It remained perfectly motionless except for an occasional jerk of its white blotched tail, when it gave vent intermittently to a guttural "gluck." These notes were repeated at irregular intervals of perhaps half a minute, several times and then, without start or warning, it launched away into the air, starting off immediately at full speed, with a drop that carried it in a large, even circle half way to the ground, and then up on the same curve, to vanish in the gloom of the trees. Then it appeared on the other side, swinging down on fixed wings in great elliptical curves as though whirled from the end of a cord, perfectly silent in flight and threading the dusky mazes of the tree tops with the utmost confidence and precision. Here and there it rapidly wheeled, without an apparent stroke of the wing, now coming into view in the lower arc of its great circling, and then vanishing silently again on the upward sweep on the other side. As suddenly as it started, it ceased in the middle of a swing and, while the eyes vainly searched for the dark object along the continuation of its course, it was seated again on the branch from which it first sprang, silent and still. This was repeated several times, and then it was joined by another, and the two circled about like great soft, gliding bats until the sky above grew so dark that their movements could no longer be watched.

The latest date we have for the species is October 14, 1906, when one was seen. During the August-September trip of 1907 but one bird was noted, straggling along after a bunch of Nighthawks that were making their way out the Point on their southern migration.

95. **Chordeiles virginianus*.—Nighthawk.

Common on all spring visits, but in the fall it is only the stragglers that are seen after September 1. In 1905 we saw one solitary bird, September 8, and another the 12th. In 1906 a few were seen September 1-3, and another single the 18th. All the early fall migrants of 1907 were a little late, and this species was observed commonly passing southward every day until August 27, when they gradually thinned out and the last was noted the 6th of September. Very few seem to do much feeding when passing along the Point on their southward migration; all then seen are steadily winging their way straight south and but occasionally making the briefest side excursion for passing insects.

96. *Chætura pelagica*.—Chimney Swift.

Common on all trips except those of October and March. Septem-

ber 15 to 22, 1906, they were scarcer than usual and the ten seen on the 19th were doubtless the last of the main body of migrants, as this is our latest date.

97. **Trochilus colubris.*—Ruby-throated Hummingbird.

Common on all May dates and, in the fall, to September 21, 1906, the latest date in that month that we have been on the Point. The first three days of September in 1906 were notable for the vast numbers of Hummers present. In certain low slashings in the open woods were luxuriant growths of Jewel Weed (*Impatiens sp?*) standing nearly shoulder high and so dense that to enter it one had to force his way through. It was simply spangled with blossoms, and all about and over it hovered and darted hundreds of Hummingbirds. From some little distance, as we approached such clumps, we were aware of innumerable little twitterings that followed each other so rapidly as to scarce be separable, one from another, and so fine, sharp, and high in pitch that it took a little effort to realize that it was real sound and not imagination or a ringing in the ears. Underlying this was a low hum that arose from the vibrations of many little wings. Approaching closer, the pugnacious little mites were all about us, chasing each other over the smooth rounded surface of the jewel weed or darting angrily at us from this side or that, with furious chatterings that made one instinctively cover the eyes, or involuntarily flinch at the expected impact of their sharp, rapier-like, little bills. If a Hummingbird were larger and still retained its same aggressive spirit in proportion to its increased size, it would be positively dangerous to stray into its haunts. As it is, such concentrated wrath wrapped up in so small and impotent a body, tempts one to coin a new simile for futile rage and say, "As mad as an angry hummingbird"; and strongly recalls Beethoven's composition, "Wrath at the Loss of a Penny." On remaining perfectly still for a few moments the turmoil resultant upon our intrusion subsided, and the disturbed proprietors of the place went about their business and their pleasure regarding us no more than any other fixture of the landscape or the trees and stumps about them. Some sat preening their feathers on a twig of a bare branch that projected through the green mass, or, on a high spray of the jewel weed itself, passing their wings through their delicate mandibles and scraping off infinitesimal particles of dust. Others busied themselves about the flowers that blossomed in such profusion, probing every cup to see whether or not some drop of nectar had not been left by previous explorers. Often two would rise over opposite sides of an obstructing mass of vegetation and meet face to face at the top. Then they would dash towards each other, squeaking and bridling with rage, but just before the final collision and when but a foot or so apart, they would both rise in the air vertically, their bodies hanging straight up and

down, their wings a blurry film on either side, and their voices squeaking defiance as they faced each other and rose, sometimes to the height of the tree tops, and once we watched a couple pass completely out of sight over our heads. Then, as if by common consent, they would drop to earth again, and seek different parts of the weed. This was repeated over and over again and sometimes by the same individuals. Each time there was the same angry dash, the same cross recrimination and the same mutual retreat. Sometimes there would be several such balanced couples in the air at one time, and we saw the action repeated many times in a few minutes. They quarreled interminably, and whenever two met, whether they soared or not, there was a furious succession of little squeaks, blending together into a sort of little song, something like this,—"*tsc tsc tsc tsc tsc tsc tsc tsc tsc*." The groups of squeaks ran into each other so that it sounded almost like a sustained note and, as the groups varied a little in pitch, it made a not unpleasant suggestion of a song.

All these birds were juveniles. Swales noted but one with the ruby throat, and Taverner one with but a single metallic feather set like a gem in its gorget

The succeeding May we had another interesting experience with a Hummingbird that was much aggrieved at our presence at his particular spot. He flew towards us, scolding with vigor, his ruby throat gleaming in the sun. When but a few feet away, and directly facing us, it paused, and swung back and forth across our path, along an arc of a circle as if swung on the arm of a long invisible pendulum. The amplitude of the swing was about twenty feet and each beat was regularly timed and seemed to be beating seconds. For about half a minute he kept it up and then dashed away and disappeared over the bush tops.

The last of August and the first of September, 1907, saw no such numbers of Hummers as described above. The early migrants were late in starting this season, and it was not until September 23, the last day of our stay, that there was any indication of numbers of migrants. Up to then we had seen but one or two each day, running up to five August 27. The last day, however, in the early morning, fifty were observed. There were no such growths of jewel weed as were seen the fall before, even in the places where it then grew so luxuriantly, and but little patches of it here and there reminded us of last year's glories. What Hummers we did see were about these little clumps.

Keays noted that in 1901 the Hummingbird was the only species that did not turn back when, in migrating out the Point, it reached the end. We verified this many times. The final end of the Point stretches out for a couple of hundred rods, in the form of a long, low, more or less winding and attenuated sand spit. Stationed about half

way out on this, it was most amusing to watch the little mites come buzzing over the last of the red-cedar bushes and then drop down towards the ground and, without pause or hesitation, follow every winding of the ever-changing sand to its extreme end, and then, with a sudden and resolute turn, square away for Pelee Island, just visible on the horizon. Dr. Jones was stationed on the opposite islands from August 26 to September 2, 1905, and makes the following statement as to the movements of the species over the waters of the lake: "Hummingbirds were passing during the daylight, and all those noted were flying very low. In fact they dropped down between the waves for protection from the wind, which was quartering, or at right angles to their line of flight and seemed to disturb them. I noticed that in the strong westerly wind, all birds headed southwest, but always drifted south."

98. **Tyrannus tyrannus*.—Kingbird.

Common on all May visits. In September, 1905, the bulk of the species had left when we arrived on the 3d, and we saw but two the next, and one each on the two succeeding days. The next year, September 1, we saw a little flock of about twenty on the mainland during our ride out to the Point, and four more on the return trip on the 4th, but none were noted on the Point itself at that time. On our return on the 15th of the same month all had gone. In 1907, when we arrived August 24, Kingbirds were very common and distributed all over the Point and the adjoining mainland. Each day brought more, until by the 27th there were a greater number of Kingbirds present than any of us had ever seen at one time before. Most of them were in the waste clearings near the end of the Point, where at times we saw flocks numbering hundreds of individuals. The dead trees scattered about the edges of these clearings were at all times more or less filled with them and it was no uncommon sight to see from fifteen to twenty in one small tree. The 29th saw the culmination of the flight, and when we went out in the morning of the 30th we found that the bulk of the kingbirds had left, and we saw but a few scattered individuals, where the day before there were hundreds. They kept steadily diminishing in numbers until September 5, when we saw none and decided that the last had left, but the next morning, before we broke camp, we saw two in the fields near one of the farm houses. Likely these were the last stragglers.

99. **Myiarchus crinitus*.—Crested Flycatcher.

On nearly all visits, except those of early spring (March) and late fall (October), we have found the Crested Flycatcher fairly common. The bulk seems to leave before the middle of September. Our latest record is September 15, 1906, though Keays lists one as late as the 19th, 1901.

100. **Sayornis phœbe.*—Phœbe.

Regular but not very common. We have never been able to recognize any decided migrational augmentation of their numbers and likely the few that we have seen on most of our trips represent the resident summer population. The greatest number we have ever noted one day was eight, October 14, 1906. Usually we do not see more than one or two, and these not every day, and usually close to one vicinity, in the neighborhood of some of the farm buildings. They are likely members of the same family, seen repeatedly. Our latest date is the above, October 14, which likely falls within the season of their migrational movement along the Point.

101. **Nuttallornis borealis.*—Olive-sided Flycatcher.

This is by no means a common flycatcher in this vicinity, nor was it noted at the Point until the fall of 1906, when one, two, and one were noted September 1, 2 and 3 respectively, and one taken the 2d. On the last day of our return trip, September 22, during our drive in, another was seen before we left the Point, on the topmost tip of a dead tree. An attempt was made to collect it, but without success. May 31, 1907, another was secured along the cross-road near camp and the same fall six in all were noted or taken August 26 and 29.

The Olive-sided is the most wary of our flycatchers. Sitting on the tip-top of some dead tree, well out in the open, it can study the ground for some distance about and allows nothing suspicious to approach too closely. Usually quiet and undemonstrative, it will once in a while launch out after some passing insect and then return again to the same perch. So situated, it presents the general appearance of a dark colored kingbird; but the dark blotches of the sides stand out prominently in contrast with the light colored center breast line and will identify it without fail as soon as a moderately good view is obtained. Under the wing, on each side of the back, and usually under the secondaries when the wing is folded are patches of almost pure white downy plumage, with a peculiar silky sheen. At times these are thrown over the folded wings forming flaring white patches against the dull olive background of the rest of the body, making a most distinctive and striking field mark. This species becomes very much attached to certain perches and can be found repeatedly day after day doing vidette duty on such favored stations. There are two or three trees on the Point that were so occupied in the fall of 1906 and again in 1907, and when one of the occupants was shot it was only a little while before another was seen in the same place. These were by no means the only perches of the kind in the neighborhood. There were many others standing well out in the open, and to human eyes just as suitable as those chosen, but which we never saw occupied. When disturbed from one station they will

fly to another, and when two or more are discovered a bird can be kept flying back and forth from one to the other many times. Their voice is loud and noisy and their "O-whe-o" can be very easily mistaken for the like call of the Crested Flycatcher before one is familiar with it.

102. **Horizopus virens.*—Wood Pewee.

Common in the spring and very abundant in the early days of fall. It is evident that the first fall movement of this species begins early in the season. The 24th of August, 1907, we found the woods of the Point already in possesion of innumerable hosts of Wood Pewees, and through early September we have always found them the most prominent bird in the landscape. Their voices can be heard any hour of the day uttering their pathetically plaintive note; and often in the night, as we have lain awake in the tent, some Pewee has aroused itself and a long drawn "pewee" has punctuated the darkness with its soft sweetness. In 1905 it remained common until September 9, when the bulk departed, but a number were noted until we left, the 14th. In 1906 the numbers gradually decreased after September 16, but some numbers were still present at the time of our departure, the 22d. In 1907 it was common from the time we arrived, August 24, to the break of camp, September 6.

103. **Empidonax flaviventris.*—Yellow-bellied Flycatcher.

We have noticed this bird in the spring but once, May 30 and 31, 1907, but in the fall we have always found it common. In 1905 it was first noted September 4th and was present in large numbers the 9th, after which it decreased to the 13th, when we left. At the time of its greatest abundance it successfully disputed with the Least Flycatcher for the first place in point of numbers. The next fall (1906) they were not quite as common, but September 1 to 3, and 15 to 22, we daily saw several. In 1907, from August 24 to September 6, they were at all times more or less common. Their numbers culminated August 29, when they became abundant, but slowly decreased the succeeding days. This species seems to start on its southward migration about the middle of August, but others come in before the earlier arrivals leave, and many linger until well into September.

104. *Empidonax trailii alnorum.*—Alder Flycatcher.

Not a common bird, but regular. It may be much more common than our notes seem to indicate, for the small flycatchers are difficult to separate without a certain amount of concentration of observation on each individual bird, and this species, without any strong characteristic, may very well be overlooked when the bushes are full of other small flycatchers and the attention is absorbed in looking for other species.

We have noted five, May 14, 1905; two, September 2, 1906, and ten,

August 29, 1907. These latter had been noted for several days in the same spot, and going over the next day with the purpose of taking recording specimens, we found them all gone. Though no specimens have been taken, Mr. Brewster has examined series from the surrounding localities, London, Ontario; Detroit, Michigan; and Oberlin, Ohio; and has pronounced them of this sub-specific form.

105. **Empidonax minimus*.—Least Flycatcher.

One of the most abundant Flycatchers. We have found it common on all our May visits, and in September, until shortly after the middle of the month. In 1905 their numbers culminated the 9th, but there were still a few when we left the 14th. In 1906 they were common during the first three days of September, but were gone by the time of our return trip, the 15th. In 1907 we did not notice any for the first two days, but the 26th of August they commenced arriving, and by the 28th and 29th were very common. After this they gradually decreased, though they were still not uncommon when we left the 6th of September. Our latest fall date is September 14, 1905.

106. **Octocoris alpestris praticola*.—Prairie Horned Lark.

Prairie Horned Larks are usually to be found along the east beach and in the waste clearings near the end of the Point near the shore. We have noted a few on each visit, but found them especially in March and October. Specimens taken March 9, 1907, were evidently breeding or preparing to do so. From the reports of Jones on the Ohio shore, directly opposite, and Saunders, of Rondeau, a few miles east along the Ontario shore, we expect that both *O. a. alpestris* and *O. a. hoyti* will eventually be found here in the winter, but as yet we have received no specimens to verify our expectations.

107. **Cyanocitta cristata*.—Blue Jay.

We have found the Blue Jay common at all times, but more abundant in fall than spring. During the hawk flights of 1905 and 1906 they were much harassed by the Sharp-shins but, as they are perfectly able to take care of themselves and kept pretty close in the grape vine tangles, it is not probable that they suffered much, unless it was from the nervous strain of being continually on the outlook. But who ever saw a Blue Jay suffer from nervousness? In fact once within the shrubbery, they seemed to rather enjoy the situation, and from their safe retreats hurled joyous epithets at their baffled enemies. Saunders also notes the ability of the Jay to keep a whole skin against the hawks, and we have only once found the remains of a hawk-devoured bird of this species.

October 14, 1906, we noticed a very interesting migration across the lake. All morning long we saw large flocks passing out the Point. In the afternoon we followed them to the end and, though most then had passed, we witnessed one small bunch of perhaps fifty

birds essay the passage. The day was fine and clear and but very little wind blowing, but when they came out to the end of the trees they turned back and sought a large tree-top, where they settled to talk the matter over at the top of their voices. Then, reassured, they started out, rising above gun shot from the ground and making for the Ohio shore, not for Pelee Island as we supposed they would. When they got far enough out to see the blue water under them they slowed up, and when we waved our hats and shouted at them a few wavered, paused and then fled back to the shore to their tree again, followed a moment later by the whole flock. Another pow-wow was held and again they started, with great determination and seemingly filled with the motto, "Ohio or bust." This time they had hardly got well out over the lake when a Sharp-shin was discerned far in the distance, but it was enough to again send them shrieking back to their oak tree. This time the consultation lasted a little longer than before, but at last the coast seemed clear and they started once more. Again, as they drew over the water, they slightly paused as though doubtful, but no one shouted, there was not a hawk in sight and, as there was no possible excuse for backing out this time, they kept slowly and gingerly on until well started and away from land, when they settled into their pace and, when lost sight of in our glasses, were continuing on their way in a straight line that would carry them several miles to the east of Peleee Island.

EXTINCT.

Corvus corax principalis.—Northern Raven.

One of the older residents tells us that in his boyhood the Raven was well known on the Point, but the last one was seen there so long ago that he could give no information as to the date.

108. **Corvus brachyrhynchos.*—American Crow.

Common, though as but few nests are to be found when the trees are bare of leaves it is not likely that many breed on the Point itself. A few are always to be found along the beaches picking up dead fish and other food stuffs that are washed ashore. October 14-15, 1906, they had congregated in large flocks and were constantly passing up and down the Point, from the end of which we watched them gathering in the final trees and acting much as did the Jays as before described preparatory to crossing the lake.

109. **Dolichonyx oryzivorus.*—Bobolink.

Common in the cultivated fields on all May trips. In the fall they leave during the first half of September. During later August and early September they frequent the marshes in large flocks and are to be found in the early mornings in the corn fields or flying over in large compact bodies towards the end of the Point and from thence across the lake. At this season, from sunrise to about ten o'clock,

there is a steady stream of Blackbirds and Bobolinks, all making in the same direction. When they reach the end of the land they do not hesitate as do the Jays but, unless threatened by real danger from hawks or other enemies, continue their flight unhesitatingly from the time they leave their marshy roosting-grounds till they reach the other shore. When we have seen them they, too, have always taken a course that would take them some distance to the east of Pelee Island, and apparently they cross the lake at one sustained flight and do not follow the island stepping stones across.

In 1905 flocks of about one hundred and twenty-five were seen September 5, and a few more the morning of the 7th. In 1906 flocks of several hundreds each were seen September 16-18, and we found them very abundant August 24 when we arrived in 1907. They reached their maximum of abundance the 27th, after which they decreased, though, when we left September 6, there were still a few to be seen. Our latest date is September 18, 1906.

110. **Molothrus ater.*—Cowbird.

The Cowbird has been common on all visits except that of March 9 and 10, 1907. Through the first of September they are to be seen making the early morning start for across the lake with the other blackbirds and the Bobolinks. There were great numbers October 29, 1905.

111. **Agelaius phœniceus.*—Red-winged Blackbird.

A common breeder on the marshes. It was still common October 29, 1905, in mixed flocks with other blackbirds and was present in immense numbers October 14-15, 1906, when the morning migrations were especially heavy. Gardner wrote us several times during the winter of 1906-07 that fifty or so were wintering on the Point and we found a number present March 9-10 the following spring when the lake and marshes were still completely ice-bound.

113. **Sturnella magna.*—Meadowlark.

The Meadowlark is fairly common on the Point in the cultivated sections in the spring, but it is rare to see any in the fall on the Point proper, though at the same time they are usually almost abundant on the adjoining mainland. Keays reports seeing several September 19, 1901, and one was noted September 13, 1905, and several the following October 29 along the eastern sand dune. According to Gardner, a few remained all the winter of 1906-07 on the frozen marshes.

114. **Icterus spurius.*—Orchard Oriole.

It was rather a treat to us to find this beautiful species abundant on our first visit, May 13-14, 1905, and we have found them equally so on all subsequent May trips. They are, in fact, one of the com-

monest species on the Point, outnumbering the Baltimore perhaps two to one. One or more are seldom out of hearing, and their voice is always pleasant to the ear, while their forms, in all their various plumages, can be seen darting away through the trees on either hand the whole length of the Point as we follow along the road. The farmers are well acquainted with both the orioles and call this species the "Oriole," while the Baltimore is generally known as the "Golden Robin." The fruit growers of the neighborhood regard them as rather injurious to their small fruit, because they puncture large numbers of hanging grapes. Though they were as numerous as usual as late in the season as June 1, 1907, we do not think that many individuals regularly breed on the Point, as very few nests, either new or old, have been observed in late fall when such objects are very conspicuous.

The Orchard Oriole leaves in the fall a little earlier than the Baltimore. In 1905 none were present September 3. When we arrived September 1, the following year, they had likewise left, though the Baltimore was still common. In 1907 we saw two, August 26, which forms our latest date.

115. **Icterus galbula*.—Baltimore Oriole.

One of the commonest birds of the Point. His brilliant livery can be continually seen flashing from tree to tree, while his full rich voice makes the fine spring air melodious. They have been more than common on all spring visits and in all September trips, except that of 1905, when they seemed to have left a little earlier than usual. September 1 to 3, 1906, they were quite common and singing daily. One of these days we heard a little fragmentary song from one that was unlike anything we had ever heard before. Had either of us been musicians we could have imitated it perfectly. It sounded so human that at first we thought it was a boy whistling, having the same quality and timbre. It was as if some one was absent-mindedly whistling the fragments of an air, with many breaks and missing notes, as if busy with other thoughts. It was very pretty, indeed, and we suppose that it was uttered by the young male, though we could not make out this point for a certainty. We heard the almost full spring song several times. When we returned to the Point the 15th the Orioles had all gone. The fall of 1907 we saw several each day until September 2, when the last one was noted. Keays lists the species as late as September 20 in 1901. This must be regarded, however, as an exceptionally late date.

116. *Euphagus carolinus*.—Rusty Blackbird.

As is to be expected, the Rusty Blackbird is but a migrant at the Point. We have met it in flocks October 29, 1905, and the 14th and 15th of the same month in 1906. If it was present March 9 and 10,

1907, we failed to make it out among the flocks of other blackbirds seen then.

117. *Quiscalus quiscula æneus.*—Bronzed Grackle.

Found commonly on nearly all visits. There were fewer September 4 to 15, 1905, than usual, but October 14 to 15, 1906, they were in great flocks and, in the early morning, when the flocks passed over towards the end of the Point, all squeaking together, they made considerable din. Gardner reports that a few remained all the winter of 1906-7, and when we arrived March 9 a few were seen. There were large flocks present when we arrived August 24, 1907, and they remained without perceptible change in numbers to when we left September 6.

118. *Hesperiphona vespertina.*—Evening Grosbeak.

March 9, 1907, Mr. Wilkinson, of Leamington, who drove us out to the Point, told us of a number of birds he had seen a short time before that tallied so well with the descriptions of this bird that there could hardly be any doubt as to what he meant. When we got out to Gardner's he told us substantially the same thing and described them as "about the size of a robin and yellow and black, and the hen birds were a sort of grayish." He had seen them about a mile from his place, along the road, about the first of March. A number of them were killed by boys, but we were unable to get sight of any specimens or their remains. While there we hunted carefully for them in hopes that some might still remain, but without avail.

119. **Carpodacus purpureus.*—Purple Finch.

In comparison with our Detroit dates in fall this species arrives at the Point very early. October 29, 1905, about eight birds were seen, but none during the September visit. In 1906 five were seen or taken September 17, and at least thirty the 19th. Their numbers dropped suddenly then to three and one the next two succeeding days. October 14 there were great numbers and flocks of from five to a dozen were met with continually all over the wooded sections of the Point. All were either full red birds or else olive colored; none observed were in mixed or transition plumage. The dull olive colored birds sang constantly, but the red ones never. Their songs were considerably varied, but the most characteristic might be rendered, "Pe-a-we—to-te-te-to."

In 1907, W. E. Sanders saw one in the red cedar at the extreme end of the Point, August 28. This was a most unusually early bird.

120. **Loxia leucoptera.*—White-winged Crossbill.

November 14, 1907, we received a box of birds from friends on the Point. Among them was one White-winged Crossbill. On skinning it no marks of violence could be found and it was most likely picked up dead. It was quite fresh and could not have been dead more

than a few days. Asking Gardner about the species later, he said that about that time he noticed considerable flocks of small red birds that he was unacquainted with on the Point. The White-winged Crossbill is a much rarer visitor in this section than its relative the American. See Auk, XXIV, 1907, p. 145.

121. *Astragalinus tristis.*—American Goldfinch.

Seen without exception every day we have been on the Point. Less common in late fall and early spring than at other times. October 29, 1905, but one was noted, though on the 14th and 15th of the same month in 1906, they were common. March 9-10, 1907, we noted several, and three on the successive days. At all other times it has been common.

HYPOTHETICAL.

Spinus pinus.—Pine Siskin.

March 10, 1907, we saw two or three finches that we were quite certain were Pines, but as we failed to collect them and the light was very poor for glass work, we could not be absolutely certain of our identification. The following June 1st Saunders reported hearing two on the inner edge of the woods that fringe the east shore beyond the crossroad. Mr. Saunders is quite certain of his identification, and as this was a most peculiar spring, with all the migrations more or less disorganized, we accept even this late record without any very great mental reservation.

INTRODUCED.

Passer domesticus.—House Sparrow.

Point Pelee is no more free from this "Undesirable citizen" than the adjoining territory. Fortunately for the Point, it is not abundant far from towns, but there is always a fair-sized flock to each group of farm buildings.

122. **Passerina nivalis.*—Snowflake.

Of course the Snowflake is but a winter migrant on the Point. October 29, 1905, we found a few on top of the eastern sand dune along the lake shore the whole length of the Point. They did not occur in large flocks, but in singles and pairs scattered along here and there. Through the winter of 1906-07 Gardner reported large flocks of them on the marshes, but when we arrived there March 9 he told us that he had seen the last about a week previous.

123. **Poœcetes gramineus.*—Vesper Sparrow.

Not a uniformly distributed bird, but locally common, more especially late in the fall (October). They are usually common in the weedy corners of the waste fields near the end of the Point; and here, and in like places, we have always been able to find them on all visits except that of March 9 and 10, 1907, which was, of course,

too early. September 1 to 3, 1906, they were unusually abundant for this time of the year. October 29, 1905, they were still common and more uniformly distributed than we have seen them at other times.

124. *Passerculus sandwichensis savanna.*—Savanna Sparrow.

A common migrant, and likely a sparse breeder, as it nests more or less commonly along the Canadian side of the St. Clair Flats and, to a lesser extent, in the neighboring territory of Michigan. It is most commonly found along the top of the dunes of the east shore where, May 13, 1905, and again September 11 and 12 of the same year, we found a number. October 29, none were seen, though the whole of the east shore was tramped over, and they had evidently left. In 1906, we saw none in May or during the first three days of September; but in neither of these visits was much attention paid to the east shore where they were most likely to be found. On the return visit, from the 15th to the 22d of September, the species was present on its accustomed grounds and we found them in great numbers distributed all over the marsh the 19th. October 15 they were still common. None were noted in 1907 on any of our visits, May 30 to June 1, and August 24 to September 6. During the latter trip, however, we did not work the marshes and, though we did not find them about its edges as usual, we are unable to state that they were not in its interior.

125. *Coturniculus savannarum passerinus.*—Grasshopper Sparrow.

Some years ago this species was more common and of more general distribution in this locality than it is now. Personally we have not met with it on the Point, though we have found a few pairs scattered over the fields in the neighborhood of Amhurstburg, at the mouth of the Detroit River. Saunders says (Auk iv, 1887, p. 248), "The Grasshopper Sparrow breeds in Southwestern Ontario, where I have found it in different localities, notably at Pt. Pelee, where I heard it singing in early June and was comparatively common. . . . In June, 1884, there were numbers of pairs breeding in the cultivated meadows and fields." The status of the bird has certainly changed since the above observations were made, together with that of two other species of somewhat like habitat, namely, the Lark Sparrow and the Dickcissel, of which more under their respective headings. We have looked diligently for the Grasshopper Sparrow in all likely places and it is not probable that it has been overlooked.

126. *Ammodramus henslowii.*—Henslow's Sparrow.

May 24, 1906, Saunders saw and heard several near the east base of the Point, in the damp meadows bordering the marsh. May 30, 1907, in going over the same grounds we listened and looked carefully for them, but either it was during one of their periods of silence, such as the species is given to, or else they were not there this

season, for we discovered no indication of their presence. Their usual "se-silick" note, though unobtrusive in volume or pitch, has great carrying power; and is too distinctive not to be heard or recognized when the observer is acquainted with it and is listening for it.

127. *Chondestes grammacus.*—Lark Sparrow.

The Lark Sparrow seems to be another species that has retreated from its range of late years in this section and the adjoining parts of Michigan. Saunders found some numbers of them on the Point in 1884, and again May 14, 1905, he saw two in the cultivated fields by the roadside. Though we have looked carefully for the species since, we have not been able to locate it.

128. **Zonotrichia leucophrys.*—White-crowned Sparrow.

May 13, 1905, this fine sparrow was very common all over the Point, but especially so about the clumps of cottonwood along the east beach, where it was the commonest of the land birds there present. We met the species again October 14-15, 1906, but other visits have been either too early or too late to catch it on its migrations on the Point.

129.* *Zonotrichia albicollis.*—White-throated Sparrow.

A common and regular migrant. May 13 and 14, 1905, four and one were seen on their respective days, but on neither of the trips of May 21 or 30 of the two succeeding years were any noted. In the fall of 1905 a few were noted, beginning September 14, and the next year ten were observed the 15th of the same month and were still common October 14 and 15, when we made the last trip of the year. Our latest date on the Point in 1907 was September 6, but none put in an appearance before we left.

130. **Spizella monticola.*—Tree Sparrow.

A common and regular migrant and, if we can judge from reports, it must winter in considerable numbers, as during the winter of 1906-07 Gardner spoke repeatedly of seeing large numbers of "Bush Sparrows." March 9-10, 1907, we saw large flocks in the weedy edges of the fields. The day was cold and bleak, and the chorus of the combined flocks made a very cheering sound, when such cheer was welcome indeed.

131. **Spizella socialis.*—Chipping Sparrow.

On all May and September dates the Chipping Sparrow has been more than common. It frequents the road side mostly, and whether that runs through cultivated fields, pine groves or red cedar thickets, the Chipping Sparrow is invariably to be found in numbers along its length. In point of numbers it must out-rank those of all the other sparrows combined. It was common October 14-15, 1906, and even as late as October 29, 1905, it was present in some numbers.

This latter is a very late date for the species, judging by our experience in the adjoining sections of Michigan, where they usually have all disappeared by the middle of the month.

132. **Spizella pusilla.*—Field Sparrow.

Common on all May visits. In the fall the species is rather local in its distribution, but is very partial to the weedy spots in the waste clearings near the end of the Point. Until the fall of 1907 we pretty generally overlooked this species in the autumn until the secret of its distribution was discovered, when we daily found it common from August 24 to September 6, when we left. Our latest date is October 13, 1906.

133. **Junco hyemalis.*—Slate-colored Junco.

A regular and common migrant. On our earliest visit, March 9, 1907, there were several present, and May 13, 1905, we noted one solitary late bird. We have no other spring records. In September, 1906, the first was noted the 17th, and two days later four more. They were abundant the following October 14-15, and the 29th, in 1905. Keays noted their first arrival September 18, in 1901. In his letters Gardner described the bird very well and reported its presence at various times during the winter of 1906-07.

134. **Melospiza cinerea melodia.*—Song Sparrow.

Not as common as would naturally be expected. While present during all visits except that of March 9, 1907, it never seems to be a prominent bird in the landscape. This was especially true May 20-21 when, until its scarcity was noticed and we commenced a special search for it, it nearly escaped our observation. It has been much commoner during the late October trips than at any other time.

135. **Melospiza lincolnii.*—Lincoln's Sparrow.

May 14, 1905, two were met with in a brush pile in a slashing but, as usual with the species, when the birds were in sight they were too close to shoot, and when at a sufficient distance to collect nicely they were not to be seen. This species is one of the most persistent skulkers that we have. They frequent dense brushy masses and, when collectors are around, generally keep to their deepest recesses. Usually, however, when approached, they will hop to some commanding position and view the intruder for an instant. Then, if the observer is bent on taking specimens, is the time to shoot, but it must be done instantly, for the next second the bird will be gone deep in the tangle, and it is rarely seen again. On the other hand, though difficult to shoot, it is one of the easiest birds to trap, and does not seem to have the least suspicion that strange combinations of sticks or springs can harbor any danger. On its migrations we have never heard it utter any distinctive note, and as it so closely resembles the Song Sparrow in appearance, it is not an easy bird to identify

during the brief hurried glance that it allows us, unless the conditions of light and situation are excellent. In general, however, it can often be told by the evener and grayer cast of the back, lacking the more conspicuous longitudinal streaks of the former bird. Of course, when a clear view of the breast is obtained, with its ochraceous band, fine spotting high up on the breast, and the lack of the heart mark so conspicuous in nearly all plumages of the Song Sparrow, it is easily identified. September 20, 1906, Saunders took one bird from amongst some Song Sparrows in a brush pile in Gardner's yard.

136. *Melospiza georgiana.*—Swamp Sparrow.

Though a common breeder on the St. Clair Flats and an abundant and regular migrant locally in our territory about Detroit, our records for the species on the Point are few and not perfectly satisfactory. Keays lists two seen September 19, 1901. We have two not very convincing sight records, October 15, 1906, and June 1, 1907. Neither of these birds were seen well enough for us to be perfectly positive of our identification. We searched the marshes carefully for them September 10, 1905, the 19th, 1906, and October 15, 1906, but without avail. At the time of the latter date they should have been very common, as we find great hosts of them in such places at this date about Detroit.

137. **Passerilla iliaca.*—Fox Sparrow.

On but one occasion have our visits fallen within the dates of the migrations of the species. October 14-15, 1906, several were seen. At least seven the first day and one the next.

138. **Pipilo erythropthalmus.*—Towhee.

Not very common during spring dates. Very few seen May 13-14, 1905, and but moderately common the 20th and 21st, and 30th and 31st of the same month of the two succeeding years. Quite common the first half of September and one seen as late as October 29, 1905. In 1906 but one was seen the first three days of September, and but two from the 15th to the 22d, but October 14-15 it was common. From August 24 to September 6, 1907, from one to fifteen were seen every day. Our earliest spring date is March 9, 1907, when one was taken in the still snow-filled woods. We were inclined to regard this as a wintering bird, but as the next week there were several to be seen about Detroit, it is not at all clear that it was not an early migrant. Our latest date is October 20, 1905.

139. **Cardinalis cardinalis.*—Cardinal.

Point Pelee and its vicinity boasts of being the only locality in the Dominion of Canada where the Cardinal is regular and common. The status of this species has been dwelt upon at some length in the Auk, XXIV, 1907, p. 146, by the authors and the data therein giv-

en seems to indicate that half a century ago the species was more or less common in Southeastern Michigan, but since then has retreated from its range and is only now resuming it. The history of the Point Pelee observations point in the same direction. Dr. Brodie says, "I visited Point Pelee July, 1879. . . . I formed a speaking acquaintance with several people and all had a story to tell about a 'visitation of war-birds' a few weeks previously. From descriptions given there was no doubt these 'war-birds' were Cardinals. . . . From diligent inquiries it appeared the birds were not rare summer visitants, but this season they were unusually numerous. I heard nothing that suggested the presence of females, the birds were all red."

Saunders made his first ornithological visit to the Point in late August and early September, 1882, and another in May and June of 1884, and again in September of 1900. In none of these did he discover any Cardinals. It was not until the next year, in September, when Keays visited the Point that the bird was again brought to notice. See Auk, XIX, 1902, p. 205. On that occasion the residents said that it had put in an appearance on the Point about four years previous. This last statement has since been corroborated in a certain degree by Gardner, who states that his acquaintance with the Cardinal has only been of a few years' duration; that he does not remember it as a boy, but that since some had been caught and caged by a woman on the Point, he has known the species very well and does not think that he could have overlooked it if, in the past, it had been as common as it is now. It is strange that so showy and loud whistling a bird could have been overlooked by so acute an observer as Saunders, if at the time of his visits it was as numerous as it now is, more especially as one of the visits was made in late spring before the song period had quite passed. The spring of 1907 he and Taverner were on the Point at this time and then Cardinals whistled from every hand. The evidence certainly points to the conclusion that the Cardinal occupied the Point until at least 1879, and then for a space, until about 1901, deserted the locality to a greater or less extent. It is quite common now and it would be impossible for any field naturalist to visit the Point without making its acquaintance. On all our spring visits it has been seen perched on some isolated cedar top in the warm sunshine, whistling loud and long and making patches of intense red against the dark background. They appear to be pretty well distributed over the Point, from the base to its extreme end.

In the fall they are more difficult to find. They then frequent the densest tangles in little flocks which seem to be original broods, for there are usually one or two adults and three or four juvenile birds in the company. They are intensely curious and skulk about just out of sight, uttering little clicks and cheeps that seem ridiculous from so large a bird with such fine vocal powers. We have found

them common on all visits, and without doubt they winter on the Point. March 9-10, 1907, they were in full song.

140. **Zamelodia ludoviciana*.—Rose-breasted Grosbeak.

The Rose-breasted Grosbeak was fairly common May 14, 1905, but was not seen at all May 20-21, 1906, and but two from May 30 to June 1, 1907. We have met it but once in the fall. From September 18 to 21, from one to seven were noted each day. They were very difficult to find, keeping well up in the tops of the high trees and hidden in the leaves, and the only indication of their presence was the sharp grosbeak click that occasionally came to us from somewhere overhead. Even after hearing one it was most difficult to locate it and we spent hours in the aggregate, standing under the large walnut trees, with our necks bent back, staring into the foliage, trying to locate from which quarter the sounds came. It was only in the early morning that any were noted at all. In short, this fall it was noted that, though from sunrise for a few hours certain parts of the woods would be filled with warblers and other birds, later in the day there would hardly be one in sight or to be found, and it always remained a mystery where so many birds could spend so many hours of the day without their presence being detected.

132. **Cyanospiza cyanea*.—Indigo Bunting.

Common on nearly all our visits, October 29, 1905, and March 9-10, 1907, being the only dates when we failed to note them. October 14, 1906, three late birds were seen, and a juvenile with nestling down still plentifully attached to the feathers, was taken.

133. **Spiza americana*.—Dickcissel.

The Dickcissel is another bird that, after extending its range into Southeastern Michigan, retreated again. Its history at the Point closely parallels its career in Michigan, at least as far as its recession is concerned. Personally we have not met it on Pelee, though we have looked closely for it. Saunders reports that it was common enough in 1884, and says of it,—Auk II, 307,—"June 1, 1884, W. L. Bailey, Mr. A. P. Saunders and W. E. Saunders found several Black-throated Buntings about two miles from the end of Point Pelee in a meadow—first Canadian record. Subsequently, in extending our search, we found one or more pairs in every field. . . . These birds were observed in every locality on the Point, and on the return drive they were heard constantly till we had gone three miles into the mainland and then no more were noted." Saunders also informs us that he met them again September 10, 1900, and says, "We saw five Dickcissels, but did not secure any. They were in the weed fields on the dry side of the east and west ditch and perhaps half a mile from it." The next fall, 1901, Keays did not note the bird, nor has it been seen on the Point since.

BIRDS OBSERVED IN HAWKINS COUNTY, EAST TENNESSEE.

J. H. FLEMING.

The following notes were made in the vicinity of Surgoinsville on the Holston river, between March 30 and April 15, 1907, and can by no means be considered as representing the normal conditions, for almost two weeks before my arrival the weather had been unusually warm, on March 30 the country between Bristol, Tennessee, and Rogersville, the nearest station to my destination, was ablaze with color; the peach orchards in full bloom, the pink contrasting with the pale blue of the wistaria about the houses, and the wooded, leafy hill-sides were already showing great patches of white cherry and pink red-bud. On March 31 it rained and on April 1 the higher mountains on the Virginia border were snow capped, frost came on the night of the second, and any migrations that may have been under way ceased. It was cold and rained most of the time till the 9th, when it turned to snow, the weather getting gradually colder until the ponds were frozen over, and during the remainder of my stay there was a good deal of snow alternating with rain, and sharp frosts every night. Under these conditions bird life was not very evident, and had it not been for the assistance of my friend, Mr. E. F. Handy, C. E., and the kindness of Dr. W. C. Lyons, in whose garden I was able to observe many birds, the short time at my disposal would have shown little result.

The valley of the Holston river is about 1,400 feet above sea level, the land rising gradually to sharp topped ridges that reach 1,700 feet at the back of Dr. Lyons' estate. The whole country is a succession of fertile valleys, timbered with much oak, walnut, and hickory in the uncultivated parts; separated by ridges which rise gradually on one side and drop suddenly on the other. These ridges are well covered with hardwood. Birds were scarce in the woods, probably owing to the weather conditions.

Querquedula discors.—Blue-winged Teal. A female was taken by Mr. Handy on April 11.

Fulica americana.—American Coot. One was taken on April 11.

Oxyechus vociferus.—Killdeer. A pair seen on April 2 and 3.

Colinus virginianus.—Bob-white. Resident and quite common. These are the original stock, as no new blood has been introduced, this part of Tennessee is one of the very few places where the indigenous bird can still be found. Locally called "Partridge."

Bonasa umbellus.—Ruffed Grouse. There seem to be very few left. I saw fresh signs of them and Mr. Handy had the skin of one he took in February. Locally called "Pheasant."

Zenaidura macroura.—Mourning Dove. Very common everywhere. During a snow storm I observed a pair flying in wide circles, making a very loud droning sound with their wings, quite different from the usual whistle.

Cathartes aura.—Turkey Vulture. Common resident, breeding. Dr. Lyons tells me that buzzard's quills are used to make toothpicks on account of their toughness.

Accipiter atricapillus.—American Goshawk. I saw one April 5, with the ashy breast of the fully adult bird, and Mr. Handy had seen one some time previous to this date.

Falco columbarius.—Pigeon Hawk. Mr. Handy shot one in September, 1906, and the skin is now in my collection.

Dryobates pubescens.—Downy Woodpecker. Saw four, including a pair.

Ceophlœus pileatus.—Pileated Woodpecker. Heard one on April 9, and Mr. Handy had the tail feathers of one which he had shot during the winter.

Centurus carolinus.—Red-bellied Woodpecker. Saw one on March 31, and another on April 8.

Colaptes auratus luteus.—Northern Flicker. A flock seen on April 13; only two or three seen previous to this. No specimens taken.

Sayornis phœbe.—Phœbe. Scarce; saw only four, the first on March 30.

Cyanocitta cristata.—Blue Jay. Common resident.

Corvus brachyrhynchos.—American Crow. Fairly common; usually alone or in pairs.

Agelaius phœniceus.—Red-winged Blackbird. Saw several April 7; one taken on the 18th.

Sturnella magna.—Meadowlark. Several seen April 1 to 8.

Quiscalus quiscula.—Purple Grackle. Small flocks seen April 1. None were taken, but I got near enough to individuals to be reasonably sure that they were not *æneus.*

Carpodacus purpureus.—Purple Finch. Abundant in flocks from

March 31 to April 12, feeding on elm buds. There was a good proportion of red birds, and on April 8 I heard a bird in the striped olive plumage singing.

Astragalinus tristis.—American Goldfinch. Large flocks feeding on the elm. On April 2 a few birds were changing to spring plumage, and by April 13 a good many had partially changed.

Spinus pinus.—Pine Siskin. Saw a number on April 1 feeding with a flock of Goldfinches.

Passer domesticus.—English Sparrow. Found generally distributed along roads, in fields, and about houses, but not very plentiful anywhere. The conditions are much the same as in England, and the birds seem less active and more contented with a permanent country life than they do further north.

Poœcetes gramineus.—Vesper Sparrow. A few seen from April 1 to 11, and a flock on April 13.

Zonotrichia albicollis.—White-throated Sparrow. A male seen on April 8.

Spizella socialis.—Chipping Sparrow. Saw a few on March 30. They were very common on April 2, and remained so until April 11, when a flock of over one hundred was seen, but on the 13th only a few were seen.

Spizella pusilla.—Field Sparrow. Saw one on April 3, and they became common until large flocks were seen from the 11th to the 13th. Shot a partial albino on the 15th, and Mr. Handy saw two more on the 11th.

Junco hyemalis.—Slate-colored Junco. Not common. The only ones seen were a few about the outbuildings. The ones I took proved to belong to this form, and were apparently barren birds.

Melospiza cinerea melodia.—Song Sparrow. Saw one April 11, and another April 13.

Pipilo erythrophthalmus.—Towhee. A male seen April 8.

Cardinalis cardinalis.—Cardinal. Common resident. One was seen carrying nesting materials on April 5. I found this bird as often in the hard-wood brush as about the houses, but always in pairs.

Ampelis cedrorum.—Cedar Waxwing. Saw several large flocks from March 31 to April 4.

Dendroica coronata.—Myrtle Warbler. Fairly common in winter dress from March 31 to April 9, on which latter date the first one in changing plumage was noted; and birds in nearly full plumage were noted from the 11th to the 14th. These warblers roost at night in the red cedars.

Mimus polyglottos.—Mockingbird. Resident and fairly common. One pair had a nest in Dr. Lyons' garden, but had not more than finished it before the cold wave came, so there were no eggs in the nest.

Toxostoma rufum.—Brown Thrasher. Two seen April 3, and one on the 10th, and one on the 11th.

Thryothorus ludovicianus.—Carolina Wren. First seen on April 2, and several were seen on April 7. They were no doubt keeping out of the way until the cold wave was over.

Thryomanes bewickii.—Bewick's Wren. Fairly common about the houses. One was singing on April 3, and Mr. Connor Lyons found a nest and one egg on the 9th. This wren seems to have a much more loosely jointed tail than has the House Wren; it gives one the impression of being worked on a ball socket.

Sitta carolinensis.—White-breasted Nuthatch. Fairly common from April 1 to 13, sometimes in small flocks, but usually in pairs. Specimens I examined have a more slender beak than Ontario birds.

Parus bicolor.—Tufted Titmouse. Several seen from April 7 to 11.

Parus carolinensis.—Carolina Chickadee. Fairly common and well distributed in the woods.

Polioptila cærulea.—Blue-gray Gnatcatcher. One seen and one shot on April 8.

Merula migratoria.—American Robin. A few seen on March 30, and no others until April 5. After that date several flocks were seen up to April 15. The birds appeared to be migrants. Although no birds were taken I doubt if they were *achrusteus*. Mr. Handy failed to find any breeding.

Sialia sialis.—Bluebird. Fairly common in fields and new clearings.

THE RUFFED GROUSE (*Bonasa umbellus*) IN PENNSYLVANIA.

FRANK L. BURNS.

During the season of 1906, that king of game birds, the "Pheasant" of Pennsylvania, perhaps reached its high-water mark in point of abundance for recent years, especially in our northern counties; and the reports to our game commissioners confirmed the belief that it was present in every county of the state excepting only Philadelphia. I have been fortunate in securing a number of skins through the kindness of several local sportsmen returning from several weeks' shooting in the upper tier of counties; one bird being in the beautiful gray plumage, "Silver-tail" as it is locally known; some five or six

were taken in Wayne county. It has been the favorite theory of one of my sportsman friends, that inasmuch as he and his party had killed 125 birds the previous season in this one locality, about 100 of them being males, their places had been filled by the more numerous Canadian Ruffed Grouse from the north. Mr. Witmer Stone of the Philadelphia Academy of Natural Sciences examined my specimen and I am sure he will pardon me for quoting him without permission: "I have seen others like it from the state, and some that were even *more* gray; unfortunately, however, I have not a good series here for comparison. The case is just this way: (a) If the Canadian birds are all or nearly all gray and the southern birds practically all red, then Pennsylvania is the meeting ground of the two races and such a bird as yours is an intermediate. (b) On the other hand if you get both red and gray birds, both north and south, then the difference is dichromatic or individual, like the Screech Owl, and there *is no Canadian race*, even though gray birds predominated somewhat to the northward or *vice versa*. I have not the material to settle this matter, but Edwyn Sandys and L. E. Van Dyke in Upland Game Birds say of the Canadian birds that they have 'shot hundreds of them in every Canadian province except one * * * * have bagged smoky tufts, black tufts, brown tufts and no tufts; gray tails, grayish-brown tails, and reddish-brown tails; have had all but one of them in the same bag, and killed a brown tail with one barrel and gray tail with the other.' If this is really the condition in the stronghold of *togata* then I should say there was only one Ruffed Grouse in the east. But some parts of Canada are as 'Carolinian' as Pennsylvania, or nearly so, and others are pure 'Boreal' and the above statement does not take this into consideration. It is a matter for careful study with a big series of specimens. All I can say is that with my present knowledge of the subject I can see no difference between your bird and our Maine and Canadian *togata* except in its having a little more red-brown in its plumage." My father was a famous "Pheasant" shot, and killed a great many birds in a period extending over half a

century, in Chester and adjacent counties; yet he does not remember having ever taken the Silver tail. I have examined several hundred birds in the meat taken in northern Pennsylvania previous to 1906 and found not more than one or two in the gray phase. The past open season seems to have been a failure in spite of the care taken to prevent forest fires and rigorous enforcement of the game laws in the state. Friends returning from Wayne and Cameron counties report scarcely one old bird where there were a dozen last season and practically no young at all. Of fourteen birds secured but a single one was of the year. It appears that the late and very rainy spring proved extremely unfavorable to the breeding of this hitherto supposed very hardy bird; few eggs hatched and the nesting birds were attacked by a disease said to resemble the roup, the sitting bird was frequently found stiff and cold on her nest of addled eggs, others were picked up fluttering and helpless in the woods unable to escape their enemies. It seems scarcely possible that the Grouse had become too thick to thrive?

THE WILSON BULLETIN

A Quarterly Magazine Devoted to the Study of Living Birds. Official Organ of the Wilson Ornithological Club.

Edited by LYNDS JONES.

PUBLISHED BY THE CLUB, AT OBERLIN, OHIO.

Price in the United States, Canada and Mexico, 50 cents a year, 15 cents a number, postpaid. Price in all countries in the International Postal Union, 65 cents a year, 20 cents a number. Subscriptions may be sent to Lynds Jones, Oberlin, Ohio, or to Mr. Frank L. Burns, Berwyn, Penn.

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EDITORIAL.

This is the last issue of the BULLETIN at the subscription price which has from the beginning resulted in a deficit which the editor has always met. It has been impossible to print the BULLETIN for fifty cents a year. The advance to a dollar a year will be accompanied by a doubling in the number of pages and the introduction of a number of illustrations in each issue. The value of the BULLETIN will be more than doubled. 1908 will therefore mark an epoch in the history of the BULLETIN.

The editor has ready for sale reprints of the first three numbers of the New Series of the BULLETIN at fifty cents a set. These three numbers constitute the first volume of this series. The greatest care has been taken to make these reprints conform exactly to the original prints word for word, line for line, and page for page. The only changes are in the size of type—10-point instead of 8-point—and in correcting the spelling of about a dozen common words. The reprints are uniform in size with the other numbers of the New Series up to and including No. 29. We can guarantee their accuracy in the above stated particulars.

With the initiation of the new era for our BULLETIN the editor wishes to have it clearly understood that the character of the articles which will be printed in its pages will be improved both as to their bearing upon the question of contributing to our knowledge of the birds and as to typography and general make-up. It rests with each reader and member to determine how far the improvements can go as to the character of the matter. Unless you are ready to contribute such articles and notes as you may be able to, it will be impossible to make the improvement that is greatly desired. Won't you make this a personal matter and plan to contribute something during the year?

What kind of matter is appropriate to the pages of the BULLETIN for 1908? Well prepared local lists of regions which have not already been covered by such lists. Systematic comments upon the species of a region which was covered by a local list two or more decades ago, this assuming the form of a local list if there has been much or significant change in the bird life of the region. Carefully worked out and well prepared Preliminary lists of the birds of a region which is little known in a general way and scarcely at all known to those outside of it in a special way. As an instance: a list of the birds of Morgan county, Ohio, would be a welcome addition to faunal literature because the region in which that county lies does not appear in bird literature except in the general way of being covered by the state list. Such lists should be copiously annotated. Lists of the birds of a region which presents some marked peculiarities having a bearing upon bird distribution are always valuable. Lists of winter birds and of summer birds, when they are carefully worked out in the field, are also valuable. Records of careful studies of any phase of bird life are always acceptable and valuable, particularly the breeding habits. Carefully worked out censuses of small areas are earnestly desired for all regions. In short, the field is so wide that it would take pages to particularize.

The editor feels certain that his action in confining his work for the Club to editing its BULLETIN and withdrawing from the Presidency of the Club will commend itself to every thoughtful member. It has not been possible to properly attend to all of the duties involved in the double responsibility to the Club in addition to the regular duties of a teacher, and with the increased work which the enlargement and improvement of the BULLETIN involves, the burden would become impossible. The editor fully believes that the change will prove of great advantage to the Club. Its development and that of the BULLETIN can go forward together.

The Twenty-fifth Annual meeting of the American Ornithologists' Union, held in Philadelphia, December 9 to 12, was the first meeting of this body which it has been the privilege of the writer to attend. One of the marked features of this meeting was the good fellowship which prevailed everywhere and at all times. The local committee's efforts to make this meeting a most enjoyable one were crowned with success. Most of the papers presented were of a popular scientific nature since the general public were invited to the meetings, but it was not difficult to perceive a deep undercurrent of the scientific spirit pervading those who are engaged in the active business of studying the birds. A great mass of facts has been gathered; we must now inquire what they mean. The next meeting of the Union was set for November 16, 1908, at Cambridge, Mass. It is not too early to begin planning to attend that meeting now. A fuller attendance of ornithologists would be of great advantage to the cause of the study of the birds as well as an inspiration to the individual.

GENERAL NOTES.

NOTES FROM BRISTOL, CONN. The following scattered notes may prove of interest as illustrating what seem to be unusual conditions in this vicinity during the past year.

Pine Grosbeaks appeared December 2, 1906, and were last seen March 31, 1907. They were unusually plentiful for this locality.

Evening Grosbeaks were first seen on February 27, the last day on which they were recorded. The males were in brilliant plumage, and at least one sang *sotto voce* on one occasion. We could see them eating maple seeds, and they appeared to eat snow. They were often within twenty-five feet of us.

On April 27 I had a rare experience with an American Woodcock. As I was walking in a woods with some companions a sitting Woodcock caught my eye just as I was about to step upon her. The bird made no least motion while I watched her, and while my companions came up and looked until they were satisfied. As I stooped toward her with extended hand she made no move until my hand was within six inches of her head, when she suddenly flew off. There were three young in the nest, one of which stood up and stepped out of the nest; another nestled down motionless except for a slight movement of the head. The air was cold so we hastened away to permit the mother to return and hover the young. Two days later I found four shells in the nest. Doubtless one of the eggs was covered by the young and was not seen on the first day. FRANK BRUEN, *Bristol, Conn.*

HENSLOW'S SPARROW IN OHIO IN 1907. The rarity of this Sparrow in Ohio makes its appearance in some numbers and at two widely sep-

arated places worthy of mention. Mr. George L. Fordyce found it on April 30 and May 1 about seven miles south of Youngstown. This is the first record for that locality. I found a single bird in a field about a mile northwest of Amherst on April 22, and at least half a dozen singing males in a field at what is known as Rye Beach, some three miles west of Huron and a half mile from Lake Erie, on April 29, and on each visit to that locality during the entire spring and breeding season. No nests were found in this field, but there could scarcely be any doubt about the fact of breeding. It is to be regretted that the region of Oberlin, where the birds were found on two former occasions, could not be carefully worked during their breeding season. This bird is both local and erratic in its breeding distribution, and should be watched for in meadows and low fields.

Lynds Jones, *Oberlin, Ohio.*

Field Notes from Berwyn, Penn.—The cold, wet and late spring of 1907 not only played havoc with our migration averages, but not unnaturally affected the periods of song and nesting. I noticed a male American Redstart as late as June 9th, fly down to our stable steps and from there to the water trough, and after a moment flash past me to the spruce hedge. This species, so far as I know, has never nested in the county, yet it was seen and heard up to the 17th of June, a pretty late date for a non-breeder, when it is taken into consideration that we look for its reappearance on its autumnal migration soon after the last of July.

I must mention a most curious incident occurring at the residence of Mr. John A. Brown, near Devon. On the north side of the house, facing a grove quite close to the rear, a large plate glass window reflects the woods so perfectly that a person would think he was looking into its cool depth, especially during those dull, cheerless days. This illusion frequently deceived the birds. Mr. McCarthy, who brought me for identification a Kentucky Warbler killed by flying against this glass, informed me that they picked up dead birds almost every day under the window, especially Oven-birds; also Catbirds, Magnolia, and other migrating Warblers.

On the 6th day of July, while I was taking snapshots from a window at the wary House Sparrows visiting one of my bird boxes, I unintentionally killed a Robin in its flight to feed a brood of young located in this sparrow-infested box, twenty-five feet in the air. The upper portion of one side of an apartment had become detached, and, much to my surprise, utilized by this bird. I am glad to say that the mate proved faithful and brought up the young, which were a second brood. On August 5th a brood of young Flickers left the locust tree, and on the 9th the last brood of Swifts left the chimney

and the second family of House Wrens were able to fly from their home box.

The song period extended in many instances well into midsummer and even later, and the end of the first and beginning of the second period was not clearly defined. Up to and including July 2nd, the Vesper, Grasshopper, Chipping, Field, and Song Sparrows, Chewink, Indigo Bunting, Scarlet Tanager, Red-eyed and Warbling Vireos, Maryland Yellow-throat, Catbird, Wood Thrush, and Robin were in song during the middle of the day, as well as early morning and evening. The Worm-eating and Kentucky Warblers did not cease singing until after July 10th, and the Chat until three days later. The Robin was heard at 3 a. m. on the 16th and did not become entirely silent until after the 29th. August 2nd marked the last song of the Black and White Warbler, and the 5th of the Chipping Sparrow, Indigo Bunting, Scarlet Tanager, and Maryland Yellow-throat. On the 8th the Chewink sang its last, and I noted the Kentucky Warbler still chipping in the undergrowth. The Baltimore Oriole retired for the season as a musician August 22nd; Field Sparrow, 25th; Blue-winged Warbler, 26th; the Mourning Dove, Yellow-billed Cuckoo, Flicker, Red-eyed Vireo and Oven-bird on the 27th; Orchard Oriole, 28th; American Redstart, September 5th, and finally the Warbling Vireo on the 14th of September. Frank L. Burns.

Berwyn, Penn.

A Screech Owl that Played Santa Claus.—One afternoon last February, on opening the door of my cabin in the woods near Pensauken, N. J., I was not a little surprised to find a Screech Owl within. The bird had entered the stove pipe and came down twelve feet of pipe and around two elbows and gotten into the stove, where its flapping about had displaced one of the stove lids, and hence it had flown into the room. When I attempted to catch it the bird snapped its bill fiercely and showed signs of fight, but when finally caught it gave up completely and appeared to feign death, that is, it allowed itself to lie in my hands limp and apparently lifeless. I placed it upon the table, where it lay upon its side without movement. I tried to get it to sit upon my finger, but it would allow itself to fall, and only when it found that it was actually falling would it attempt to cling to the finger and regain its balance. I tossed it into the air, thinking it would take wing, but it allowed itself to fall to the floor, after which it flew across the room and alighted on a shelf. The bird was of the rufus plumage and entirely unhurt, and this passive manner of allowing itself to be handled was new to me. Toward evening it became very restless and flew about the room, and as I would approach it would utter a single note—a sound entirely unknown to me in a Screech Owl—more like the squawk of a

Green Heron than anything else I can liken it to, and would follow with a savage snapping of the bill. The next morning I placed it upon a branch outside, but it was some moments before it realized that it was free and flew away. Chreswell J. Hunt.

Philadelphia.

RECENT LITERATURE.

American Birds[1] is a recent profusely illustrated book from photographs from life, with the accompanying text in the popular scientific style, but making no pretensions to the scientific accuracy which is characteristic of those who are engaged in scientific researches in animal behavior. The book is rather another of the accurate popular books of the best class. The illustrations are for the most part clear and selected with a view to their value in depicting the family life of the birds studied. The general account of each group studied is in large, clear type, and this is followed by a brief but comprehensive description of plumage and range in smaller type. "In this book no attempt has been made to include all the different bird families, but a series of representative birds from the hummingbird to the eagle has been selected. . . . Many of these studies were made in the West, but in the list of birds treated an effort has been made to get a selection that is national in scope." In this book no one can fail to find entertainment of the most wholesome kind, and it should occupy a place beside books which contribute to the knowledge of the life of our birds. L. J.

The Warblers of North America[2] is one of the most important contributions to ornithological literature of the year. It has been prepared at great labor and expense to meet a growing demand for a book to which the bird student may go with assurance of success in properly determining which of the host of warblers he has seen. That the book meets this demand is attested by the eagerness with which its appearance was awaited and the promptness of its wide

[1] American Birds|Studied and Photographed|from Life|by William Lovell Finley,|illustrated from photographs by|Herman T. Bohlman| and the author.| Charles Scribner's Sons, New York. 1907. $1.50, *net.*

[2] The Warblers|of|North America,|by|Frank M. Chapman.|with the coöperation of other ornithologists|with twenty-four full-page colored plates, illustrating|every species, from drawings by Louis Agassiz Fuertes|and Bruce Horsfall, and half-tones|of nests and eggs.| New York:|D. Appleton & Company.|1907. 8vo. Cloth. $3.00, *net.*

use. In illustration and typography there is little left to be desired. The treatment of each species is full and clear. L. J.

The Passenger Pigeon[1] is treated in 225 pages, mainly historically, but with an effort to determine if any yet remain in the country. The book is largely one of reminiscences of persons who lived during the great abundance of these birds, supplemented by historical records of the marketing of them. In treating of the causes of extinction the author and contributors are of the opinion that killing for market and the destruction attendant upon that enterprise is sufficient to account for the disappearance of this game bird. As to the present status of the Pigeon it is stated by no less an authority than John Burroughs that there is still a small flight which pretty regularly crosses the Caskills. The hope is expressed that this remnant may presage a reappearance of the host. L. J.

The Birds of Iowa[2] supplies a need which has been felt since the abbreviated catalogue prepared by Keyes and Williams went out of print only three or four years after its appearance. The present list assumes the character of a compilation of published records, notes solicited from and contributed by ornithologists of the state and workers who have gone to other fields. We notice the omission of some papers from the bibliographical list, but the obscurity of the journals in which they occurred no doubt accounts for the omissions. The Catalogue is concerned with making "some contributions to our knowledge of their habits and economic relations, their migrations; to trace their local distribution and comparative abundance at the present time, and to determine, if possible, what changes the rapid growth of settlement and civilization have wrought in our avifauna during the comparatively brief period since the settlement of our state." Three hundred and fifty-four species and subspecies are treated as authentic native birds, one imported, and twenty-five are entered as hypothetical. We are glad to see this catalogue in print and congratulate the author upon its neat appearance. L. J.

Useful Birds and their Protection[3] is a timely contribution to the all too scanty literature relating to the subject of which it treats. Although it is local in character and deals largely with local conditions it cannot fail of being of general use. It is profusely illus-

[1] The|Passenger Pigeon,|by|W. B. Mershon,|New York:|The Outing Publishing Company.|1907. $.00, *net*.

[2] Proceedings|of|the Davenport Academy of Sciences,|The Birds of Iowa,|by Rudolph M. Anderson,|Davenport, Iowa, U. S. A.|Davenport Academy of Sciences.|1907.

[3] Useful Birds|and their Protection,|containing|brief descriptions of

trated, each illustration selected with a view to its bearing upon the subject under discussion. The title of the book sufficiently illustrates the character of its contents. Suffice it to say in this brief review that the State of Massachusetts has set an example which can be followed by other states with profit to their citizens. The excellence of the work accomplished attests the fitness of the author for the task assigned to him. L. J.

The Birds of Missouri[1] is a most welcome addition to our faunal literature, and coming, as it does, after the discouraging and distressing loss of the first prepared manuscript, is a satisfaction both to the author and to his friends who feared that his long years of careful work might be lost. This is the first catalog of the birds of the whole state of Missouri, and the designation "A Preliminary Catalog," admirably illustrates the modesty of the author, whose thirty years of field work in that state certainly gives him the right to have adopted a more pretentious title.

The Introduction, Bibliography, Explanations, Faunal Areas, The Climate, Topography, Decrease of Birds, and Bird Protection, are topics which occupy the first twenty pages. In the following 246 pages the author treats 383 species of birds, thirty of which he regards as hypothetical, but occurring in adjacent regions within reasonable distances of Missouri. Each of the hypothetical species is bracketed and placed in its proper systematic position in the list. We commend this practice.

The body of the book is given to the annotations accompanying the names of the species, its general geographical distribution, distribution in Missouri, migrations, and other pertinent notes, especially the type of locality where rare birds may be found.

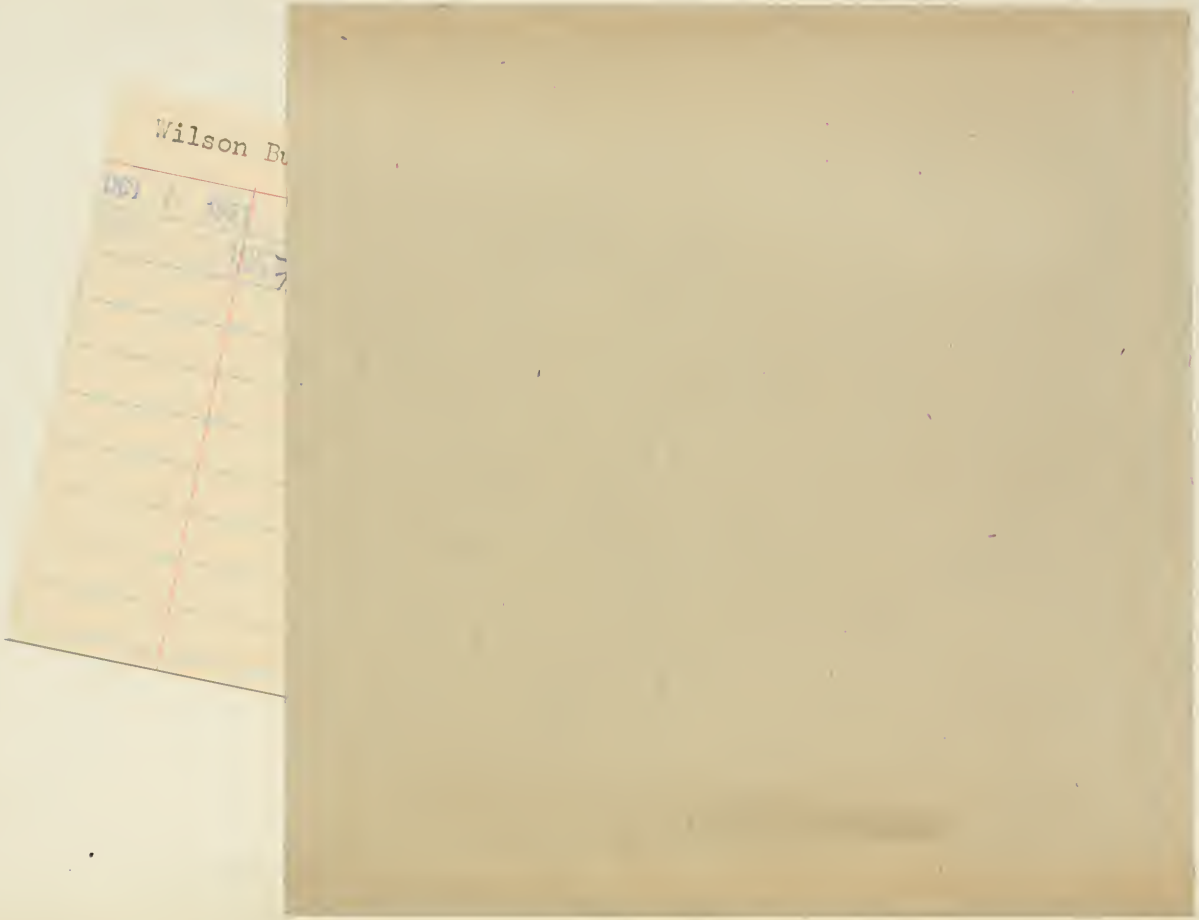
The print is large and clear, and the typographical errors few. It is a valuable addition to ornithological literature, and we congratulate the author and the Academy of Science of St. Louis upon its appearance. L. J.

the more common and useful species of|Massachusetts, with accounts of their food habits,|and a chapter on the means of attract|ing and protecting birds.|By|Edward Howe Forbush,|Ornithologist to the Massachusetts State Board of|Agriculture.|Illustrated by the author,|C. Allan Lyford, Chester A. Reed, and others.|Published under the direction of|the Massachusetts State Board of Agriculture,|by authority of the Legislature.

[1] A Preliminary Catalog|of the|Birds of Missouri,|by|Otto Widmann,|St. Louis, Mo.|1907.

The Birds of the Chicago Area[1] strikes us as something new in faunal literature in that political boundaries are wholly ignored by the author. This is as it should be. Political boundaries mean nothing unless they chance to coincide with faunal boundaries. The area here treated comprises "all of Cook and DuPage Counties, the nine north townships of Will County and the northern portion of Lake County, Indiana." An interesting feature of the introductory part of this book is a special treatment of "Localities of Interest," with their birds. The body of the book, comprising 170 pages, treats the species systematically, the present accepted name being followed by a list of synonyms, these by the occurrence of the species in the area in question, then often interesting remarks concerning the species, closing with the general range in North America. It is a valuable addition to faunal literature. L. J.

[1] The Birds of the Chicago Area,|by|Frank Morely Woodruff,|Bulletin No. VI.|of|The Natural History Survey,|The Chicago Academy of Sciences,|issued April 15, 1907.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